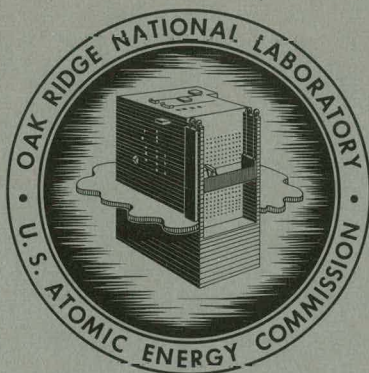ORNL-2954
UC-34 – Physics and Mathematics

TABLE OF ELECTRON WAVE FUNCTIONS

AT THE NUCLEAR SURFACE

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M. E. Rose

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I. INTRODUCTION

In nuclear beta decay, the differential energy spectrum of the beta particles depends on the electron radial functions which are evaluated at the nuclear surface, as well as on the nuclear matrix elements which are considered as adjustable parameters. Rose, Perry and Dismuke[1,2] tabulated the pertinent combinations of the electron radial wave functions which have been extensively used for the analysis of the beta spectrum. Rose et al assumed a point nucleus and an unscreened Coulomb field. The nuclear radius was taken as $1.4 \ A^{1/3} \ 10^{-13}$ cm.

Also Rose and Holmes[3,4] investigated the effects of the finite nuclear size on these functions.

However, in recent years a large number of the "post" parity experiments have been performed after the confirmation[5,6] of the breakdown of the parity and the charge-conjugation symmetry laws in nuclear β decay. These experiments involve the measurements of the pseudoscalar quantities, e.g., the beta polarization from unoriented nuclei, the angular distribution of the β particles from oriented nuclei, and the β-γ (circular polarization) correlation. Till present, no accurate tables for the electron radial functions exist for the analysis of these experiments. Also no detailed tables of the electron wave function at the nuclear surface, in which the finite nuclear size effects have been considered[3,4], are available even for the "classical" beta experiments. To provide such tables is the motivation of this work.

In this work we have considered the nucleus to be a sphere of a uniform charge distribution with the nuclear radius as $1.2 \, A^{1/3} \, 10^{-13}$ cm. The extremely small effect of screening has been neglected. In these tables, we give the values of the electronic radial functions f_x and g_x evaluated at the nuclear surface for $x = \pm 1$, and the Fermi function F_o. Also we give $\sin(\eta_{|x|} - \eta_{-|x|})$ for Coulomb field only (for $|x| = 1$). From these tables, all the various combinations which occur in the formulas for the allowed and the first forbidden beta transitions can be easily calculated.

For the beta spectrum[7,8,9], the following combinations of the electron radial functions have been used and for the purpose of completeness[10] they are given here.

$$L_{k-1} = (2p^2 F_o)^{-1} \, \rho^{2-2k} \, (g_{-k}^2 + f_k^2)$$

$$M_{k-1} = (2p^2 F_o)^{-1} \, \rho^{-2k} \, (g_k^2 + f_{-k}^2)$$

$$N_{k-1} = (2p^2 F_o)^{-1} \, \rho^{1-2k} \, (f_{-k} g_{-k} - f_k g_k)$$

$$P_{k-1} = (2p^2 F_o)^{-1} \, \rho^{2-2k} \, (g_{-k}^2 - f_k^2)$$

$$Q_{k-1} = (2p^2 F_o)^{-1} \, \rho^{-2k} \, (g_k^2 - f_{-k}^2)$$

$$R_{k-1} = (2p^2 F_o)^{-1} \, \rho^{1-2k} \, (f_{-k} g_{-k} + f_k g_k)$$

For the β longitudinal polarization[11,12], the following combinations can be used:

$$A_{k-1} = (p^2 F_o)^{-1} \, \rho^{2-2k} \, f_k g_{-k} \sin \Delta_k$$

$$B_{k-1} = (p^2 F_o)^{-1} \, \rho^{-2k} \, f_{-k} g_k \sin \Delta_k$$

$$C_{k-1} = (p^2 F_o)^{-1} \, \rho^{1-2k} \, (f_k f_{-k} + g_k g_{-k}) \sin \Delta_k$$

$$D_{k-1} = (p^2 F_o)^{-1} \, \rho^{1-2k} \, (f_k f_{-k} - g_k g_{-k}) \sin \Delta_k$$

In the above, we have $\sin \Delta_k \equiv \sin (\eta_k - \eta_{-k})$. The formulas for the β longitudinal polarization in the first forbidden beta transitions are given by Lee-Whiting[13]. Other combinations are involved in angular correlation involving β-particles.

In the next section we give the outline of the formulation of the problem, followed by the methods of computation (Section 3). In Section 4, we give the explanation of the different entries in these tables.

2. FORMULATION OF THE PROBLEM

Throughout this work, we use the rationalized relativistic units: $\hbar = m = c = 1$. We denote by $f_{\varkappa}$ and $g_{\varkappa}$ the radial functions of the β particle evaluated at the nuclear surface. In this work we take the nucleus as a sphere of a uniform charge distribution with the nuclear radius ρ as $1.2 \, A^{1/3} \, 10^{-13}$ cm. This charge distribution corresponds to a potential as given by the following:

$$V = -\frac{\alpha Z}{r} \qquad \text{for } r > \rho$$

$$V = -\frac{\alpha Z}{2\rho}\left(3 - \frac{r^2}{\rho^2}\right) \qquad \text{for } r < \rho \tag{1}$$

We write the solution of the Dirac equation

$$(-\alpha \cdot p - \beta + V)\,\Psi = W\,\Psi \tag{2}$$

as

$$\Psi_{\varkappa}^{\mu} = \begin{pmatrix} -i\, f_{\varkappa}(r)\; \chi_{-\varkappa}^{\mu} \\ \\ g_{\varkappa}(r)\; \chi_{\varkappa}^{\mu} \end{pmatrix} \tag{2a}$$

We take the normalization of $f_{\varkappa}$ and $g_{\varkappa}$ to correspond to one particle in a sphere of unit radius. For convenience, we also introduce the following definitions:*

---

*$F_{\varkappa}$ is not to be confused with F_0, the Fermi function, since $\varkappa \neq 0$.

$$r \, f_\varkappa \equiv F_\varkappa$$

$$(3)$$

$$r \, g_\varkappa \equiv G_\varkappa$$

The solution of the Dirac equation (2) for the Coulomb field, as given by Rose[14], is represented by

$$\psi_\varkappa^\mu = \begin{pmatrix} -i \, \dfrac{\mathcal{J}_\varkappa}{r} \, \chi_{-\varkappa}^\mu \\[2mm] \dfrac{\mathcal{G}_\varkappa}{r} \, \chi_\varkappa^\mu \end{pmatrix} \qquad (4.a)$$

In (4.a), $\mathcal{J}_\varkappa$ and $\mathcal{G}_\varkappa$ are the regular solutions multiplied by r. Again, for clarity, we give, below, the notation.

$$j = |\varkappa| - \tfrac{1}{2}$$

where

$$\ell = \varkappa \qquad ; \qquad \varkappa > 0$$

$$\ell = -(\varkappa + 1) \qquad ; \qquad \varkappa < 0$$

$$\gamma_\varkappa = \sqrt{\varkappa^2 - (\alpha Z)^2}$$

$$\alpha = \frac{1}{137.03}; \; Z \text{ is the number of protons in the daughter nucleus.}$$

The asymptotic behavior of $\mathcal{J}_\varkappa$ and $\mathcal{G}_\varkappa$ is given by

$$\mathcal{J}_\varkappa \longrightarrow -\sqrt{\frac{W-1}{W}} \, \sin(pr + \delta_\varkappa)$$

$$(4.b)$$

$$\mathcal{G}_\varkappa \longrightarrow \sqrt{\frac{W+1}{W}} \, \cos(pr + \delta_\varkappa)$$

where δ, the phase, is given by

$$\delta_\varkappa = y \log 2 \, pr - \arg \Gamma(\gamma_\varkappa + iy) + \eta_\varkappa - \frac{\pi \gamma_\varkappa}{2} \qquad (4.c)$$

where $\quad y \equiv \alpha Z W / p \qquad\qquad\qquad (4.d)$

and

$$e^{2i\eta} = -\frac{\varkappa - i\alpha Z/p}{\gamma_\varkappa + iy} \tag{4.e}$$

We shall denote by $\overline{\mathcal{F}_\varkappa}$ and $\overline{\mathcal{G}_\varkappa}$ the irregular solutions for the Coulomb field and they can be obtained by changing $\gamma_\varkappa \to -\gamma_\varkappa$ in $\mathcal{F}_\varkappa$ and $\mathcal{G}_\varkappa$ respectively. At the nuclear radius ρ, we have*

$$\left\{ \begin{array}{c} \mathcal{F}_\varkappa \\ \mathcal{G}_\varkappa \end{array} \right\} = \frac{(1 \mp W)^{\frac{1}{2}}}{W^{\frac{1}{2}}} \cdot (2p\rho)^\gamma \; e^{\pi y/2} \; \frac{\left| \Gamma(\gamma_\varkappa + iy) \right|}{\Gamma(2\gamma_\varkappa + 1)}$$

$$\frac{1}{2} \left\{ e^{-ip\rho + i\eta} (\gamma + iy)\,_1F_1(\gamma_\varkappa + 1 + iy, 2\gamma_\varkappa + 1; 2ip\rho) \mp c.c. \right\} \tag{4.f}$$

where the confluent hypergeometric function can be represented by the series

$$_1F_1(a,b;Z) = \frac{\Gamma(b)}{\Gamma(a)} \sum_{m=0}^{\infty} \frac{\Gamma(a+m)}{\Gamma(b+m)} \cdot \frac{Z^m}{m!}$$

over the entire complex plane $|Z| < \infty$.

In the following, we denote by $\dfrac{\mathcal{F}_\varkappa^{(i)}}{r}$ and $\dfrac{\mathcal{G}_\varkappa^{(i)}}{r}$ the regular solution of the Dirac equation (2) for $r < \rho$. Then from the definitions of $F_\varkappa$ and $G_\varkappa$ as given in (3), we get

$$\left. \begin{array}{l} F_\varkappa(r) = A\,\mathcal{F}_\varkappa^{(i)}(r) \\ G_\varkappa(r) = A\,\mathcal{G}_\varkappa^{(i)}(r) \end{array} \right\} \quad r < \rho \tag{5}$$

and

$$\left. \begin{array}{l} F_\varkappa(r) = B\,\mathcal{F}_\varkappa(r) + C\,\overline{\mathcal{F}_\varkappa}(r) \\ G_\varkappa(r) = B\,\mathcal{G}_\varkappa(r) + C\,\overline{\mathcal{G}_\varkappa}(r) \end{array} \right\} \quad r > \rho \tag{6}$$

---

*In (4.f), $(1 - W)^{\frac{1}{2}} = + i(W - 1)^{\frac{1}{2}}$

The normalization condition on $f_\varkappa$ and $g_\varkappa$ corresponding to one particle in a sphere of unit radius gives from (6) and (4.b)

$$B^2 + C^2 + 2BC \cos(\delta - \overline{\varsigma}) = 1 \tag{7}$$

where δ is given by (4.c) and $\overline{\varsigma}$ can be obtained from (4.c) by changing γ to $-\gamma$. The continuity of $F_\varkappa(r)$ and $G_\varkappa(r)$ ar $r = \rho$ gives

$$A\,\mathfrak{J}_\varkappa^{(i)}(\rho) = B\,\mathfrak{J}_\varkappa(\rho) + C\,\overline{\mathfrak{J}}_\varkappa(\rho) \tag{8.a}$$

$$A\,\mathfrak{g}_\varkappa^{(i)}(\rho) = B\,\mathfrak{g}_\varkappa(\rho) + C\,\overline{\mathfrak{g}}_\varkappa(\rho) \tag{8.b}$$

From (8.a) and (8.b)

$$A = \left(\frac{\mathfrak{J}/\mathfrak{g} - \overline{\mathfrak{J}}/\overline{\mathfrak{g}}}{\mathfrak{J}^{(i)}/\mathfrak{g}^{(i)} - \overline{\mathfrak{J}}/\overline{\mathfrak{g}}} \right)_\varkappa \frac{\mathfrak{g}_\varkappa}{\mathfrak{g}_\varkappa^{(i)}} B \tag{9}$$

In (9) we have put a subscript $\varkappa$ on the parenthesis to imply that all these functions carry the subscript $\varkappa$ and also whenever, we do not give the arguments of these functions, it will mean that they are evaluated at the nuclear surface. Similarly we get from (8.a) and (8.b)

$$C = \left(\frac{\mathfrak{J}/\mathfrak{g} - \mathfrak{J}^{(i)}/\mathfrak{g}^{(i)}}{\mathfrak{J}^{(i)}/\mathfrak{g}^{(i)} - \overline{\mathfrak{J}}/\overline{\mathfrak{g}}} \right)_\varkappa \frac{\mathfrak{g}_\varkappa}{\overline{\mathfrak{g}}_\varkappa} B \tag{10.a}$$

we define

$$C \equiv BH \tag{10.b}$$

then

$$H = \left(\frac{\mathfrak{J}/\mathfrak{g} - \mathfrak{J}^{(i)}/\mathfrak{g}^{(i)}}{\mathfrak{J}^{(i)}/\mathfrak{g}^{(i)} - \overline{\mathfrak{J}}/\overline{\mathfrak{g}}} \right)_\varkappa \frac{\mathfrak{g}_\varkappa}{\overline{\mathfrak{g}}_\varkappa}. \tag{11.a}$$

From (7), therefore, we get

$$B = \left[1 + H^2 + 2H \cos(\delta - \overline{\varsigma}) \right]^{-\frac{1}{2}} \tag{11.b}$$

From (5) and (9)

$$g_\varkappa(\rho) = \frac{1}{\rho} G_\varkappa(\rho) = B \left(\frac{\mathfrak{F}/\mathfrak{g} - \overline{\mathfrak{F}}/\overline{\mathfrak{g}}}{\mathfrak{F}^{(i)}/\mathfrak{g}^{(i)} - \overline{\mathfrak{F}}/\overline{\mathfrak{g}}} \right) \frac{\mathfrak{g}_\varkappa}{\rho} \qquad (12)$$

From equations (5) and (2)

$$f_\varkappa(\rho) = \frac{\mathfrak{F}_\varkappa^{(i)}(\rho)}{\mathfrak{g}_\varkappa^{(i)}(\rho)} \cdot g_\varkappa(\rho) \qquad (13)$$

We want to evaluate $f_\varkappa(\rho)$ and $g_\varkappa(\rho)$ as given by (13) and (12).

We observe the following that in (11.b) H^2 and H cos ($\mathfrak{s}$ - $\overline{\mathfrak{s}}$) are independent of the choice of phases of η and $\overline{\eta}$. In the evaluation of B, we have used the following convention:

For $\varkappa > 0$; η and $\overline{\eta}$ lie in the first quadrant

$\varkappa < 0$; η and $\overline{\eta}$ lie in the second quadrant.

The value of B, using the above convention, is independent of this choice of the (arbitrary) phases. To evaluate $g_\varkappa$ and $f_\varkappa$ from (12) and (13), we need to know the following:

$$\left(\frac{\mathfrak{F}}{\mathfrak{g}} \right)_\varkappa \; ; \; (\overline{\mathfrak{F}}/\overline{\mathfrak{g}})_\varkappa \quad \text{and} \quad (\mathfrak{F}^{(i)}/\mathfrak{g}^{(i)})_\varkappa \; ,$$

which again are independent of the choice of phases. These are given by (16) and (17). They can be easily derived by using the following radial equations:

$$\frac{d\mathfrak{F}}{dr} = \frac{\varkappa}{r} \mathfrak{F} - (W - 1 + \frac{\alpha Z}{r}) \mathfrak{g} \qquad (14.a)$$

$$\frac{d\mathfrak{g}}{dr} = (W + 1 + \frac{\alpha Z}{r}) \mathfrak{F} - \frac{\varkappa}{r} \mathfrak{g} \qquad (14.b)$$

and

$$\frac{d\,\mathcal{J}^{(i)}}{dr} = \frac{\varkappa}{r}\,\mathcal{J}^{(i)} - (W - 1 - V)\,\mathcal{g}^{(i)} \tag{15.a}$$

$$\frac{d\,\mathcal{g}^{(i)}}{dr} = (W + 1 - V)\,\mathcal{J}^{(i)} - \varkappa\,\frac{\mathcal{g}^{(i)}}{r} \tag{15.b}$$

where

$$V = -\frac{\alpha Z}{2\rho}\left(3 - \frac{r^2}{\rho^2}\right) \tag{15.c}$$

We have

$$\left(\frac{\mathcal{J}}{\mathcal{g}}\right)_{\varkappa} = \frac{\gamma + \varkappa}{\alpha Z}\left(\frac{\sum_n S_n}{\sum_n T_n}\right)_{\varkappa} \tag{16.a}$$

where $S_o = T_o = 1$ and

$$S_n = -\frac{\alpha Z\,\rho}{n(n + 2\gamma)}\left[\frac{(W - 1)(\gamma + n + \varkappa)}{\varkappa + \gamma}\,T_{n-1} + (W + 1)\,S_{n-1}\right]$$

$$T_n = \frac{\alpha Z\,\rho}{n(n + 2\gamma)}\left[\frac{(W + 1)(\gamma + n - \varkappa)}{\varkappa - \gamma}\,S_{n-1} - (W - 1)\,T_{n-1}\right] \tag{16.b}$$

$(\overline{\mathcal{J}/\mathcal{g}})$ is obtained by changing $\gamma \to -\gamma$ in (16).

For $\varkappa < 0$;

$$\left(\mathcal{J}^{(i)}/\mathcal{g}^{(i)}\right)_{\varkappa} = \rho\,\frac{\sum_n b_n}{\sum_n a_n} \tag{17.a}$$

where

$$a_o = 1; \quad b_o = -\frac{W - 1 + 3\alpha Z/2\rho}{2k + 1} \tag{17.b}$$

and

$$b_n = \left\{-\left(W - 1 + \frac{3\alpha Z}{2\rho}\right)a_n + \frac{\alpha Z}{2\rho}\,a_{n-1}\right\}(2n + 2k + 1)^{-1} \tag{17.c}$$

$$a_n = \frac{p^2}{2n}\left\{\left(W + 1 + \frac{3\alpha Z}{2p}\right)b_{n-1} - \frac{\alpha Z}{2p}\,b_{n-2}\right\} \tag{17.d}$$

For $x > 0$; $(\mathcal{J}^{(i)}/\mathcal{G}^{(i)})_x$ is obtained from equation (17) by interchanging $\mathcal{J}^{(i)}$ and $\mathcal{G}^{(i)}$ and changing sign of W and Z. $(\mathcal{G}/\overline{\mathcal{G}})_x$ is given by

$$(\mathcal{G}/\overline{\mathcal{G}})_x = \sigma\,\frac{\sum\limits_n T_n}{\sum\limits_n \overline{T_n}} \tag{18.a}$$

where $\overline{T}_n$ is obtained from (16.b) by replacing $\gamma \rightarrow -\gamma$ in T_n and

$$\sigma = (2p\,p)^{2\gamma}\,\frac{\left|\Gamma(\gamma + iy)\right|}{\left|\Gamma(-\gamma + iy)\right|}\cdot\frac{\Gamma(1 - 2\gamma)}{\Gamma(1 + 2\gamma)}\cdot\left[\frac{(Wx - \gamma)(x - \gamma)}{(Wx + \gamma)(x + \gamma)}\right]^{\frac{1}{2}} \tag{18.b}$$

Also in the evaluation of B, we need $\cos(\delta - \overline{\delta})$, which is given by (19).

$$\cos(\delta - \overline{\delta}) \equiv \mathrm{Re}\;e^{i\,\arg\,\Gamma(-\gamma+iy)}\,e^{-i\,\arg\,\Gamma(\gamma+iy)}\,e^{i(\eta - \overline{\eta})}\,e^{-i\pi\gamma}$$

$$\cos(\delta - \overline{\delta}) = \frac{1}{\sqrt{\gamma^2 + y^2}}\left[y\cos\pi\gamma + \gamma\sin\pi\gamma\right]\mathrm{Re}\,\frac{\Gamma(-\gamma+iy)}{\left|\Gamma(-\gamma+iy)\right|}\cdot\frac{\left|\Gamma(\gamma+iy)\right|}{\Gamma(\gamma+iy)}$$

$$+\frac{1}{\sqrt{\gamma^2 + y^2}}\left[\gamma\sin\pi\gamma - y\cos\pi\gamma\right]\mathrm{Im}\,\frac{\Gamma(-\gamma+iy)}{\left|\Gamma(-\gamma+iy)\right|}\cdot\frac{\left|\Gamma(\gamma+iy)\right|}{\Gamma(\gamma+iy)} \tag{19}$$

To calculate $\dfrac{\mathcal{G}_x(p)}{p}$ in (12), we use (4.f) with the following phase convention:

$\eta_{|x|}$ and $\eta_{-|x|}$ lie in the first quadrant

With this convention:

$$\sin(\eta_{|x|} - \eta_{-|x|}) = +\frac{|x|}{\left[(x)^2 + (\alpha Z/p)^2\right]^{\frac{1}{2}}}$$

From (4.c)

$$\sin \Delta \equiv \sin (\delta_{|\varkappa|} - \delta_{-|\varkappa|}) = \sin (\eta_{|\varkappa|} - \eta_{-|\varkappa|}) \qquad (20)$$

Again, it must be noticed that, though we have used this phase convention for

$\dfrac{g_\varkappa}{f}$ and $\sin (\eta_{|\varkappa|} - \eta_{-|\varkappa|})$, the functions A_{k-1}, B_{k-1}, C_{k-1} and D_{k-1} (for

the polarization) and L_o, M_o . . . Q_o and R_o are independent of this choice of

phase for $\eta_\varkappa$. The Fermi function is given by

$$F_o(W,Z) = 4(2p\rho)^{2(\gamma-1)} e^{\pi y} \left[\frac{|\Gamma(\gamma + iy)|}{\Gamma(2\gamma + 1)} \right]^2$$

3. METHOD OF COMPUTATION

(a). In the computations of $\dfrac{\sum\limits_{n} S_n}{\sum\limits_{n} T_n}$; $\dfrac{\sum\limits_{n} T_n}{\sum\limits_{n} T_n}$; $\dfrac{\sum\limits_{n} \overline{S_n}}{\sum\limits_{n} \overline{T_n}}$; of equations (16)

and (18) and $\dfrac{\sum\limits_{n} b_n}{\sum\limits_{n} a_n}$ of (17), the series were terminated when the contribution

of the terms was less than 10^{-6}.

(b). The confluent hypergeometric series in (4.f) for $\dfrac{g_\varkappa}{f}'$ was terminated

when the real and the imaginary parts were $\leqslant 10^{-6}$.

(c). Complex gamma functions were obtained by using[10]

$$\log_e \Gamma(z) = (z-\tfrac{1}{2}) \log_e z - z + \tfrac{1}{2} \log_e 2\pi + \sum_{n=1}^{9} \frac{(-)^{n-1}}{2n(2n - 1)} B_n \frac{1}{z^{2n-1}}$$

The $\log_e \Gamma(z)$ was computed by making the real part of z $\geqslant 4$ so that the series

in the last term is rapidly convergent. $\Gamma(z)$ was obtained from $\log_e \Gamma(z)$

and the recurrence relation

$$\Gamma(z - 1) = \frac{\Gamma(z)}{z - 1}$$

was used to get the $\Gamma(z)$ for the required z-value. B_n denotes the Bernoulli numbers.

$B_1 = 0.166667$ $\qquad\qquad$ $B_6 = 0.253113$

$B_2 = 0.333333 \times (10^{-1})$ $\qquad$ $B_7 = 0.116667 \times (10)$

$B_3 = 0.238095 \times (10^{-1})$ $\qquad$ $B_8 = 0.709216 \times (10)$

$B_4 = 0.333333 \times (10^{-1})$ $\qquad$ $B_9 = 0.54912 \times (10^2)$

$B_5 = 0.757576 \times (10^{-1})$

(d). The real gamma functions were computed using

$$\Gamma(1 + x) = \left[\left(\frac{1 - x}{1 + x}\right) e^{-2\lambda} \frac{\pi x}{\sin \pi x}\right]^{\frac{1}{2}} \qquad \text{for } -\tfrac{1}{2} \leqslant x \leqslant \tfrac{1}{2}$$

where

$$\lambda = \sum_{n=1}^{10} C_{2n-1} \, x^{2n-1}$$

$C_1 = -0.422784$ $\qquad;\qquad$ $C_{11} = 0.449262 \times (10^{-4})$

$C_3 = 0.673523 \times (10^{-1})$ $\quad;\quad$ $C_{13} = 0.94395 \times (10^{-5})$

$C_5 = 0.738555 \times (10^{-2})$ $\quad;\quad$ $C_{15} = 0.20392 \times (10^{-5})$

$C_7 = 0.119275 \times (10^{-2})$ $\quad;\quad$ $C_{17} = 0.4492 \times (10^{-6})$

$C_9 = 0.223155 \times (10^{-3})$ $\quad;\quad$ $C_{19} = 0.1004 \times (10^{-6})$

The accuracy is of seven significant digits.

For the positron, all the formulas were used by replacing Z by - Z. This work was done on the ORACLE of the Oak Ridge National Laboratory.

4. EXPLANATION OF THE TABLES

Z correspond to the atomic number of the daughter nucleus. For the electron, the parent nucleus is $(Z - 1, A)$ and for the positrons, the parent nucleus is $(Z + 1, A)$. A is the mass number. The values of Z and A are listed at the top of each table. For twenty values of p in steps of 0.5 up to p equal to 10.0, F_o, f_1, g_1, f_{-1}, g_{-1} and sin Δ (where $\Delta = \eta_1 - \eta_{-1}$) are given for 93 values of Z separately for the electrons and the positrons.

In all these tables each entry appears in the form of a six digit number m followed by a positive or negative integer r and $0.1 \leq m < 1.0$. This is to be read as $m \times 10^r$. However, when $r = 0$, this exponent is omitted. As an illustration, we take ELECTRON, $Z = 10$ and $A = 20$, F_o is written as .166099 1 which means $F_o = .166099 \times (10)^1$. Also f_1 is given as $- .211429$, which is not followed by any positive or negative integer. This means that $r = 0$.

One of us (C.P.B.) wishes to express his appreciation to Mr. James H. Marable for helping in the early stages of the programming of this problem for the ORACLE.

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ELECTRONS

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.166099	1	-.211429		-.744086	- 2	-.261414	- 1	.884827		.989516
1.0	.140686	1	-.642953		-.231663	- 1	-.469668	- 1	.154588	1	.997348
1.5	.134362	1	-.116005	1	-.430734	- 1	-.680693	- 1	.216224	1	.998819
2.0	.131827	1	-.170554	1	-.654189	- 1	-.900942	- 1	.275460	1	.999335
2.5	.130542	1	-.226101	1	-.896463	- 1	-.113373		.333464	1	.999574
3.0	.129786	1	-.282021	1	-.115568		-.138057		.390787	1	.999704
3.5	.129295	1	-.338078	1	-.143112		-.164216		.447695	1	.999783
4.0	.128951	1	-.394170	1	-.172249		-.191887		.504329	1	.999834
4.5	.128697	1	-.450252	1	-.202964		-.221088		.560764	1	.999869
5.0	.128500	1	-.506303	1	-.235248		-.251829		.617048	1	.999894
5.5	.128342	1	-.562309	1	-.269097		-.284116		.673209	1	.999912
6.0	.128212	1	-.618264	1	-.304507		-.317953		.729264	1	.999926
6.5	.128102	1	-.674166	1	-.341476		-.353340		.785227	1	.999937
7.0	.128008	1	-.730012	1	-.380003		-.390278		.841106	1	.999946
7.5	.127925	1	-.785801	1	-.420083		-.428767		.896906	1	.999953
8.0	.127853	1	-.841531	1	-.461717		-.468806		.952632	1	.999958
8.5	.127787	1	-.897202	1	-.504901		-.510394		.100829	2	.999963
9.0	.127728	1	-.952814	1	-.549633		-.553529		.106387	2	.999967
9.5	.127674	1	-.100837	2	-.595913		-.598211		.111939	2	.999970
10.0	.127625	1	-.106386	2	-.643737		-.644436		.117484	2	.999973

ELECTRON Z = 11, A = 24

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.174587	1	-.217206		-.836124	- 2	-.294602	- 1	.906729		.987356
1.0	.145791	1	-.654750		-.257875	- 1	-.525059	- 1	.157292	1	.996794
1.5	.138639	1	-.117837	1	-.477876	- 1	-.758457	- 1	.219526	1	.998571
2.0	.135767	1	-.173054	1	-.724365	- 1	-.100171		.279395	1	.999195
2.5	.134305	1	-.229273	1	-.991179	- 1	-.125840		.338042	1	.999485
3.0	.133442	1	-.285862	1	-.127623		-.153016		.396008	1	.999642
3.5	.132879	1	-.342580	1	-.157873		-.181774		.453556	1	.999737
4.0	.132482	1	-.399326	1	-.189832		-.212153		.510823	1	.999799
4.5	.132187	1	-.456054	1	-.223484		-.244173		.567884	1	.999841
5.0	.131957	1	-.512740	1	-.258819		-.277845		.624786	1	.999871
5.5	.131773	1	-.569372	1	-.295833		-.313175		.681556	1	.999894
6.0	.131620	1	-.625945	1	-.334521		-.350166		.738211	1	.999911
6.5	.131490	1	-.682454	1	-.374880		-.388818		.794765	1	.999924
7.0	.131378	1	-.738897	1	-.416907		-.429133		.851225	1	.999934
7.5	.131280	1	-.795273	1	-.460600		-.471109		.907597	1	.999943
8.0	.131193	1	-.851581	1	-.505956		-.514746		.963885	1	.999950
8.5	.131115	1	-.907819	1	-.552972		-.560041		.102009	2	.999955
9.0	.131044	1	-.963988	1	-.601647		-.606993		.107622	2	.999960
9.5	.130980	1	-.102009	2	-.651977		-.655601		.113227	2	.999964
10.0	.130920	1	-.107612	2	-.703961		-.705861		.118824	2	.999968

ELECTRON Z = 12, A = 25

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.183535	1	-.223205		-.926498	- 2	-.329157	- 1	.929243		.985007
1.0	.151165	1	-.667001		-.282891	- 1	-.581531	- 1	.160090	1	.996188
1.5	.143140	1	-.119741	1	-.522041	- 1	-.836309	- 1	.222954	1	.998300
2.0	.139910	1	-.175656	1	-.789041	- 1	-.110083		.283485	1	.999043
2.5	.138261	1	-.232576	1	-.107713		-.137893		.342806	1	.999387
3.0	.137283	1	-.289864	1	-.138401		-.167236		.401448	1	.999574
3.5	.136642	1	-.347276	1	-.170879		-.198193		.459670	1	.999687
4.0	.136188	1	-.404709	1	-.205110		-.230807		.517605	1	.999760
4.5	.135848	1	-.462117	1	-.241076		-.265098		.575330	1	.999811
5.0	.135583	1	-.519476	1	-.278765		-.301078		.632889	1	.999847
5.5	.135369	1	-.576774	1	-.318171		-.338753		.690308	1	.999873
6.0	.135191	1	-.634005	1	-.359290		-.378127		.747607	1	.999894
6.5	.135039	1	-.691164	1	-.402119		-.419200		.804797	1	.999909
7.0	.134908	1	-.748249	1	-.446654		-.461973		.861886	1	.999922
7.5	.134793	1	-.805260	1	-.492891		-.506445		.918880	1	.999932
8.0	.134690	1	-.862196	1	-.540830		-.552614		.975783	1	.999940
8.5	.134597	1	-.919055	1	-.590466		-.600479		.103260	2	.999947
9.0	.134513	1	-.975837	1	-.641797		-.650038		.108933	2	.999953
9.5	.134436	1	-.103254	2	-.694820		-.701289		.114597	2	.999958
10.0	.134365	1	-.108917	2	-.749533		-.754229		.120253	2	.999962

ELECTRON Z = 13, A = 27

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.192899	1	-.229384		-.102318	- 1	-.365246	- 1	.952165		.982472
1.0	.156769	1	-.679569		-.309425	- 1	-.640156	- 1	.162946	1	.995530
1.5	.147823	1	-.121690	1	-.568892	- 1	-.917195	- 1	.226452	1	.998006
2.0	.144217	1	-.178315	1	-.857809	- 1	-.120411		.287655	1	.998877
2.5	.142368	1	-.235947	1	-.116880		-.150499		.347658	1	.999281
3.0	.141268	1	-.293943	1	-.149936		-.182168		.406982	1	.999500
3.5	.140542	1	-.352056	1	-.184851		-.215507		.465882	1	.999633
4.0	.140027	1	-.410183	1	-.221584		-.250558		.524489	1	.999719
4.5	.139639	1	-.468275	1	-.260113		-.287345		.582879	1	.999778
5.0	.139335	1	-.526309	1	-.300428		-.325880		.641094	1	.999820
5.5	.139088	1	-.584274	1	-.342520		-.366170		.699163	1	.999851
6.0	.138882	1	-.642161	1	-.386386		-.408217		.757102	1	.999875
6.5	.138707	1	-.699968	1	-.432020		-.452022		.814924	1	.999894
7.0	.138554	1	-.757693	1	-.479420		-.497586		.872637	1	.999908
7.5	.138420	1	-.815334	1	-.528582		-.544908		.930245	1	.999920
8.0	.138299	1	-.872890	1	-.579502		-.593985		.987754	1	.999930
8.5	.138191	1	-.930361	1	-.632179		-.644816		.104517	2	.999938
9.0	.138092	1	-.987746	1	-.686608		-.697399		.110248	2	.999944
9.5	.138002	1	-.104504	2	-.742786		-.751730		.115971	2	.999950
10.0	.137918	1	-.110226	2	-.800711		-.807808		.121684	2	.999955

ELECTRON Z = 14, A = 29

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.202717	1	-.235764		-.112448	- 1	-.402885	- 1	.975559		.979756
1.0	.162627	1	-.692500		-.336869	- 1	-.700763	- 1	.165870	1	.994822
1.5	.152712	1	-.123693	1	-.617128	- 1	-.100051		.230035	1	.997688
2.0	.148706	1	-.181044	1	-.928442	- 1	-.131028		.291926	1	.998698
2.5	.146646	1	-.239404	1	-.126281		-.163439		.352625	1	.999166
3.0	.145415	1	-.298123	1	-.161751		-.197479		.412644	1	.999421
3.5	.144599	1	-.356951	1	-.199147		-.233241		.472234	1	.999574
4.0	.144017	1	-.415784	1	-.238424		-.270772		.531526	1	.999674
4.5	.143577	1	-.474573	1	-.279558		-.310095		.590591	1	.999742
5.0	.143231	1	-.533294	1	-.322538		-.351224		.649474	1	.999791
5.5	.142949	1	-.591935	1	-.367355		-.394165		.708200	1	.999828
6.0	.142712	1	-.650490	1	-.414003		-.438920		.766789	1	.999855
6.5	.142510	1	-.708954	1	-.462477		-.485492		.825251	1	.999876
7.0	.142334	1	-.767327	1	-.512775		-.533879		.883594	1	.999894
7.5	.142178	1	-.825605	1	-.564891		-.584080		.941825	1	.999907
8.0	.142039	1	-.883790	1	-.618823		-.636094		.999947	1	.999918
8.5	.141913	1	-.941880	1	-.674567		-.689918		.105796	2	.999928
9.0	.141798	1	-.999874	1	-.732119		-.745549		.111587	2	.999936
9.5	.141692	1	-.105777	2	-.791476		-.802985		.117368	2	.999942
10.0	.141594	1	-.111557	2	-.852634		-.862221		.123139	2	.999948

ELECTRON Z = 15, A = 31

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin \Delta$
.5	.213009	1	-.242351		-.123064	- 1	-.442123	- 1	.999434		.976864
1.0	.168752	1	-.705809		-.365266	- 1	-.763424	- 1	.168865	1	.994062
1.5	.157815	1	-.125751	1	-.666820	- 1	-.108636		.233706	1	.997348
2.0	.153387	1	-.183846	1	-.100104		-.141946		.296301	1	.998506
2.5	.151102	1	-.242950	1	-.135928		-.176727		.357710	1	.999043
3.0	.149731	1	-.302407	1	-.173860		-.213184		.418438	1	.999335
3.5	.148819	1	-.361964	1	-.213785		-.251416		.478731	1	.999511
4.0	.148165	1	-.421516	1	-.255651		-.291470		.538718	1	.999626
4.5	.147669	1	-.481014	1	-.299435		-.333373		.598470	1	.999704
5.0	.147276	1	-.540433	1	-.345123		-.377137		.658029	1	.999760
5.5	.146956	1	-.599762	1	-.392705		-.422769		.717424	1	.999802
6.0	.146686	1	-.658994	1	-.442175		-.470271		.776671	1	.999834
6.5	.146455	1	-.718125	1	-.493529		-.519646		.835781	1	.999858
7.0	.146253	1	-.777154	1	-.546760		-.570892		.894763	1	.999878
7.5	.146073	1	-.836079	1	-.601866		-.624007		.953623	1	.999894
8.0	.145913	1	-.894900	1	-.658843		-.678990		.101236	2	.999906
8.5	.145767	1	-.953616	1	-.717686		-.735838		.107099	2	.999917
9.0	.145634	1	-.101223	2	-.778391		-.794547		.112950	2	.999926
9.5	.145512	1	-.107073	2	-.840955		-.855114		.118790	2	.999934
10.0	.145398	1	-.112913	2	-.905374		-.917536		.124619	2	.999940

ELECTRON Z = 16, A = 34

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.223768	1	-.249132		-.134356	- 1	-.483010	- 1	.102371	1	.973800
1.0	.175133	1	-.719446		-.395212	- 1	-.828385	- 1	.171918	1	.993252
1.5	.163121	1	-.127856	1	-.719177	- 1	-.117537		.237446	1	.996984
2.0	.158248	1	-.186706	1	-.107762		-.153287		.300752	1	.998300
2.5	.155724	1	-.246564	1	-.146125		-.190564		.362878	1	.998911
3.0	.154204	1	-.306765	1	-.186688		-.229584		.424320	1	.999243
3.5	.153188	1	-.367058	1	-.229329		-.270450		.485319	1	.999444
4.0	.152456	1	-.427333	1	-.273991		-.313210		.546002	1	.999574
4.5	.151899	1	-.487542	1	-.320648		-.357893		.606440	1	.999664
5.0	.151457	1	-.547660	1	-.369284		-.404510		.666675	1	.999727
5.5	.151094	1	-.607675	1	-.419890		-.453069		.726733	1	.999775
6.0	.150789	1	-.667581	1	-.472459		-.503574		.786633	1	.999811
6.5	.150525	1	-.727374	1	-.526984		-.556023		.846385	1	.999839
7.0	.150295	1	-.787053	1	-.583461		-.610417		.905997	1	.999861
7.5	.150090	1	-.846616	1	-.641885		-.666752		.965475	1	.999879
8.0	.149906	1	-.906063	1	-.702251		-.725028		.102482	2	.999894
8.5	.149739	1	-.965394	1	-.764555		-.785239		.108404	2	.999906
9.0	.149587	1	-.102461	2	-.828793		-.847383		.114314	2	.999916
9.5	.149446	1	-.108370	2	-.894959		-.911457		.120211	2	.999924
10.0	.149315	1	-.114268	2	-.963050		-.977455		.126096	2	.999932

ELECTRON Z = 17, A = 35

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.235111	1	-.256174		-.145851	- 1	-.525595	- 1	.104867	1	.970571
1.0	.181857	1	-.733599		-.425106	- 1	-.895218	- 1	.175076	1	.992392
1.5	.168708	1	-.130041	1	-.770854	- 1	-.126604		.241322	1	.996597
2.0	.163362	1	-.189676	1	-.115250		-.164733		.305371	1	.998082
2.5	.160584	1	-.250318	1	-.156009		-.204405		.368245	1	.998771
3.0	.158903	1	-.311296	1	-.199023		-.245846		.430432	1	.999146
3.5	.157776	1	-.372355	1	-.244157		-.289163		.492169	1	.999372
4.0	.156961	1	-.433385	1	-.291352		-.334407		.553582	1	.999519
4.5	.156338	1	-.494338	1	-.340580		-.381607		.614740	1	.999620
5.0	.155842	1	-.555189	1	-.391824		-.430777		.675686	1	.999692
5.5	.155433	1	-.615926	1	-.445072		-.481922		.736445	1	.999746
6.0	.155088	1	-.676543	1	-.500319		-.535047		.797035	1	.999786
6.5	.154790	1	-.737036	1	-.557556		-.590151		.857468	1	.999818
7.0	.154528	1	-.797405	1	-.616780		-.647233		.917751	1	.999843
7.5	.154296	1	-.857647	1	-.677984		-.706291		.977890	1	.999863
8.0	.154086	1	-.917763	1	-.741163		-.767322		.103789	2	.999880
8.5	.153896	1	-.977752	1	-.806314		-.830323		.109775	2	.999894
9.0	.153721	1	-.103761	2	-.873431		-.895289		.115748	2	.999905
9.5	.153560	1	-.109735	2	-.942509		-.962217		.121708	2	.999915
10.0	.153410	1	-.115696	2	-.101354	1	-.103110	1	.127654	2	.999923

ELECTRON Z = 18, A = 38

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.246932	1	-.263403		-.158233	- 1	-.569920	- 1	.107395	1	.967180
1.0	.188838	1	-.748038		-.457164	- 1	-.964650	- 1	.178277	1	.991483
1.5	.174493	1	-.132263	1	-.826413	- 1	-.136054		.245246	1	.996188
2.0	.168649	1	-.192688	1	-.123337		-.176727		.310039	1	.997850
2.5	.165601	1	-.254116	1	-.166742		-.218997		.373659	1	.998622
3.0	.163750	1	-.315871	1	-.212491		-.263100		.436586	1	.999043
3.5	.162503	1	-.377693	1	-.260441		-.309145		.499054	1	.999296
4.0	.161599	1	-.439473	1	-.310528		-.357189		.561186	1	.999461
4.5	.160905	1	-.501161	1	-.362721		-.407257		.623052	1	.999574
5.0	.160350	1	-.562733	1	-.417002		-.459366		.684692	1	.999655
5.5	.159892	1	-.624178	1	-.473360		-.513521		.746134	1	.999715
6.0	.159504	1	-.685488	1	-.531785		-.569725		.807394	1	.999760
6.5	.159168	1	-.746662	1	-.592272		-.627978		.868483	1	.999796
7.0	.158873	1	-.807697	1	-.654813		-.688278		.929411	1	.999824
7.5	.158609	1	-.868593	1	-.719404		-.750624		.990182	1	.999847
8.0	.158372	1	-.929349	1	-.786039		-.815010		.105080	2	.999865
8.5	.158156	1	-.989966	1	-.854711		-.881434		.111127	2	.999881
9.0	.157958	1	-.105044	2	-.925417		-.949890		.117159	2	.999894
9.5	.157774	1	-.111078	2	-.998150		-.102038	1	.123177	2	.999904
10.0	.157604	1	-.117098	2	-.107291	1	-.109288	1	.129180	2	.999914

ELECTRON Z = 19, A = 41

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.259320	1	-.270866		-.171195	- 1	-.616037	- 1	.109974	1	.963634
1.0	.196139	1	-.762894		-.490331	- 1	-.103642		.181555	1	.990524
1.5	.180535	1	-.134545	1	-.883642	- 1	-.145793		.249265	1	.995755
2.0	.174162	1	-.195779	1	-.131646		-.189061		.314817	1	.997605
2.5	.170828	1	-.258010	1	-.177750		-.233980		.379198	1	.998466
3.0	.168796	1	-.320556	1	-.226286		-.280793		.442878	1	.998934
3.5	.167421	1	-.383155	1	-.277100		-.329614		.506089	1	.999216
4.0	.166420	1	-.445698	1	-.330125		-.380500		.568953	1	.999400
4.5	.165649	1	-.508134	1	-.385327		-.433480		.631536	1	.999526
5.0	.165031	1	-.570439	1	-.442687		-.488567		.693882	1	.999616
5.5	.164519	1	-.632601	1	-.502192		-.545768		.756015	1	.999682
6.0	.164084	1	-.694615	1	-.563832		-.605086		.817953	1	.999733
6.5	.163707	1	-.756478	1	-.627601		-.666520		.879707	1	.999773
7.0	.163375	1	-.818188	1	-.693491		-.730069		.941286	1	.999804
7.5	.163079	1	-.879745	1	-.761496		-.795728		.100269	2	.999829
8.0	.162811	1	-.941148	1	-.831610		-.863494		.106394	2	.999850
8.5	.162567	1	-.100240	2	-.903827		-.933362		.112502	2	.999867
9.0	.162343	1	-.106350	2	-.978141		-.100533	1	.118594	2	.999881
9.5	.162135	1	-.112444	2	-.105455	1	-.107939	1	.124670	2	.999894
10.0	.161942	1	-.118523	2	-.113304	1	-.115553	1	.130731	2	.999904

ELECTRON Z = 20, A = 43

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.272348	1	-.278597		-.184616	- 1	-.664028	- 1	.112616	1	.959939
1.0	.203811	1	-.778253		-.524184	- 1	-.111052		.184930	1	.989516
1.5	.186875	1	-.136903	1	-.941638	- 1	-.155789		.253408	1	.995300
2.0	.179942	1	-.198972	1	-.140023		-.201659		.319745	1	.997348
2.5	.176304	1	-.262031	1	-.188798		-.249215		.384911	1	.998300
3.0	.174077	1	-.325393	1	-.240073		-.298707		.449369	1	.998819
3.5	.172565	1	-.388795	1	-.293685		-.350254		.513347	1	.999132
4.0	.171460	1	-.452124	1	-.349562		-.403914		.576965	1	.999335
4.5	.170606	1	-.515332	1	-.407668		-.459716		.640291	1	.999474
5.0	.169920	1	-.578394	1	-.467983		-.517674		.703366	1	.999574
5.5	.169350	1	-.641299	1	-.530492		-.577796		.766214	1	.999648
6.0	.168864	1	-.704040	1	-.595186		-.640084		.828855	1	.999704
6.5	.168443	1	-.766617	1	-.662056		-.704536		.891298	1	.999748
7.0	.168070	1	-.829027	1	-.731096		-.771151		.953554	1	.999783
7.5	.167738	1	-.891271	1	-.802299		-.839924		.101563	2	.999811
8.0	.167437	1	-.953348	1	-.875657		-.910851		.107752	2	.999834
8.5	.167162	1	-.101526	2	-.951165		-.983928		.113924	2	.999853
9.0	.166909	1	-.107700	2	-.102882	1	-.105915	1	.120079	2	.999869
9.5	.166675	1	-.113858	2	-.110860	1	-.113651	1	.126217	2	.999882
10.0	.166458	1	-.119999	2	-.119052	1	-.121600	1	.132337	2	.999894

ELECTRON Z = 21, A = 49

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.285817	1	-.286477		-.199259 - 1		-.713805 - 1		.115268	1	.956099
1.0	.211700	1	-.793757		-.561123 - 1		-.118752		.188310	1	.988460
1.5	.193372	1	-.139270	1	-.100531		-.166252		.257541	1	.994822
2.0	.185852	1	-.202162	1	-.149294		-.214970		.324644	1	.997077
2.5	.181891	1	-.266034	1	-.201130		-.265473		.390571	1	.998126
3.0	.179459	1	-.330192	1	-.255599		-.318021		.455779	1	.998698
3.5	.177801	1	-.394369	1	-.312527		-.372735		.520491	1	.999043
4.0	.176585	1	-.458455	1	-.371838		-.429674		.584826	1	.999267
4.5	.175643	1	-.522399	1	-.433491		-.488866		.648852	1	.999421
5.0	.174883	1	-.586178	1	-.497466		-.550326		.712608	1	.999531
5.5	.174250	1	-.649780	1	-.563747		-.614061		.776120	1	.999612
6.0	.173710	1	-.713199	1	-.632322		-.680072		.839406	1	.999674
6.5	.173240	1	-.776435	1	-.703183		-.748357		.902477	1	.999722
7.0	.172825	1	-.839485	1	-.776321		-.818912		.965342	1	.999760
7.5	.172453	1	-.902349	1	-.851729		-.891735		.102801	2	.999791
8.0	.172116	1	-.965029	1	-.929399		-.966818		.109047	2	.999817
8.5	.171808	1	-.102752	2	-.100932	1	-.104416	1	.115275	2	.999838
9.0	.171525	1	-.108983	2	-.109150	1	-.112374	1	.121484	2	.999855
9.5	.171263	1	-.115196	2	-.117591	1	-.120557	1	.127673	2	.999870
10.0	.171018	1	-.121390	2	-.126255	1	-.128963	1	.133844	2	.999883

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.300391	1	-.294865		-.213282	- 1	-.765876	- 1	.118081	1	.952121
1.0	.220293	1	-.810431		-.595231	- 1	-.126639		.191953	1	.987356
1.5	.200466	1	-.141835	1	-.106246		-.176704		.262036	1	.994321
2.0	.192312	1	-.205639	1	-.157395		-.227919		.330005	1	.996794
2.5	.188003	1	-.270419	1	-.211626		-.280868		.396800	1	.997944
3.0	.185347	1	-.335474	1	-.268475		-.335821		.462870	1	.998571
3.5	.183531	1	-.400538	1	-.327759		-.392902		.528436	1	.998950
4.0	.182194	1	-.465497	1	-.389396		-.452173		.593615	1	.999195
4.5	.181155	1	-.530302	1	-.453346		-.513664		.658475	1	.999364
5.0	.180314	1	-.594930	1	-.519585		-.577390		.723056	1	.999485
5.5	.179613	1	-.659369	1	-.588099		-.643358		.787383	1	.999574
6.0	.179013	1	-.723616	1	-.658877		-.711571		.851474	1	.999642
6.5	.178490	1	-.787668	1	-.731908		-.782026		.915342	1	.999695
7.0	.178027	1	-.851524	1	-.807185		-.854720		.978995	1	.999737
7.5	.177612	1	-.915186	1	-.884700		-.929650		.104244	2	.999771
8.0	.177235	1	-.978655	1	-.964446		-.100681	1	.110568	2	.999799
8.5	.176891	1	-.104193	2	-.104641	1	-.108619	1	.116872	2	.999822
9.0	.176574	1	-.110501	2	-.113060	1	-.116780	1	.123156	2	.999841
9.5	.176280	1	-.116790	2	-.121699	1	-.125161	1	.129421	2	.999857
10.0	.176006	1	-.123060	2	-.130559	1	-.133762	1	.135666	2	.999871

ELECTRON Z = 23, A = 51

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.315240	1	-.303294		-.229164	-1	-.819660	-1	.120852	1	.948011
1.0	.228974	1	-.826925		-.634354	-1	-.134860		.195515	1	.986205
1.5	.207594	1	-.144347	1	-.112919		-.187785		.266398	1	.993798
2.0	.198780	1	-.209019	1	-.167042		-.241926		.335176	1	.996497
2.5	.194107	1	-.274654	1	-.224387		-.297885		.402771	1	.997754
3.0	.191216	1	-.340546	1	-.284463		-.355936		.469627	1	.998439
3.5	.189232	1	-.406425	1	-.347077		-.416207		.535963	1	.998852
4.0	.187767	1	-.472177	1	-.412142		-.478761		.601894	1	.999121
4.5	.186625	1	-.537755	1	-.479615		-.543628		.667487	1	.999305
5.0	.185699	1	-.603133	1	-.549470		-.610823		.732781	1	.999437
5.5	.184925	1	-.668303	1	-.621693		-.680352		.797804	1	.999535
6.0	.184261	1	-.733260	1	-.696270		-.752218		.862571	1	.999609
6.5	.183682	1	-.798002	1	-.773191		-.826416		.927097	1	.999667
7.0	.183168	1	-.862530	1	-.852447		-.902945		.991388	1	.999713
7.5	.182706	1	-.926844	1	-.934029		-.931798		.105545	2	.999750
8.0	.182288	1	-.990945	1	-.101793	1	-.106297	1	.111930	2	.999780
8.5	.181905	1	-.105483	2	-.110414	1	-.114645	1	.118292	2	.999805
9.0	.181551	1	-.111851	2	-.119265	1	-.123224	1	.124633	2	.999826
9.5	.181223	1	-.118198	2	-.128346	1	-.132032	1	.130952	2	.999844
10.0	.180918	1	-.124524	2	-.137655	1	-.141069	1	.137251	2	.999859

ELECTRON Z = 24, A = 52

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.331054	1	-.312131		-.245219	- 1	-.875746	- 1	.123735	1	.943775
1.0	.238241	1	-.844266		-.673094	- 1	-.143340		.199256	1	.985007
1.5	.215206	1	-.146996	1	-.119436		-.199081		.270998	1	.993252
2.0	.205686	1	-.212590	1	-.176350		-.256037		.340641	1	.996188
2.5	.200622	1	-.279137	1	-.236562		-.314827		.409098	1	.997555
3.0	.197479	1	-.345924	1	-.299552		-.375732		.476803	1	.998300
3.5	.195314	1	-.412679	1	-.365117		-.438883		.543974	1	.998750
4.0	.193710	1	-.479290	1	-.433166		-.504344		.610725	1	.999043
4.5	.192457	1	-.545706	1	-.503654		-.572148		.677121	1	.999243
5.0	.191438	1	-.611906	1	-.576555		-.642308		.743204	1	.999387
5.5	.190584	1	-.677880	1	-.651851		-.714833		.808999	1	.999493
6.0	.189851	1	-.743624	1	-.729530		-.789721		.874524	1	.999574
6.5	.189210	1	-.809138	1	-.809581		-.866972		.939792	1	.999637
7.0	.188640	1	-.874421	1	-.891995		-.946581		.100481	2	.999687
7.5	.188129	1	-.939475	1	-.976763		-.102854	1	.106959	2	.999727
8.0	.187664	1	-.100430	2	-.106388	1	-.111285	1	.113413	2	.999760
8.5	.187238	1	-.106890	2	-.115332	1	-.119950	1	.119844	2	.999788
9.0	.186845	1	-.113327	2	-.124510	1	-.128847	1	.126252	2	.999811
9.5	.186481	1	-.119742	2	-.133919	1	-.137977	1	.132638	2	.999830
10.0	.186140	1	-.126135	2	-.143560	1	-.147339	1	.139001	2	.999847

ELECTRON Z = 25, A = 55

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.347509	1	-.321193		-.262327	- 1	-.933881	- 1	.126651	1	.939418
1.0	.247856	1	-.861931		-.714181	- 1	-.152121		.203041	1	.983762
1.5	.223083	1	-.149683	1	-.126354		-.210802		.275643	1	.992685
2.0	.212818	1	-.216203	1	-.186260		-.270728		.346151	1	.995865
2.5	.207341	1	-.283662	1	-.249566		-.332535		.415462	1	.997348
3.0	.203929	1	-.351340	1	-.315729		-.396510		.484007	1	.998156
3.5	.201572	1	-.418964	1	-.384533		-.462788		.552000	1	.998644
4.0	.199820	1	-.486422	1	-.455883		-.531433		.619555	1	.998961
4.5	.198447	1	-.553664	1	-.529731		-.602479		.686736	1	.999179
5.0	.197329	1	-.620668	1	-.606050		-.675939		.753585	1	.999335
5.5	.196389	1	-.687426	1	-.684821		-.751821		.820128	1	.999450
6.0	.195581	1	-.753934	1	-.766032		-.830123		.886382	1	.999538
6.5	.194874	1	-.820191	1	-.849671		-.910845		.952362	1	.999606
7.0	.194245	1	-.886200	1	-.935727		-.993981		.101808	2	.999661
7.5	.193679	1	-.951961	1	-.102419	1	-.107953	1	.108353	2	.999704
8.0	.193164	1	-.101748	2	-.111505	1	-.116747	1	.114873	2	.999740
8.5	.192693	1	-.108275	2	-.120831	1	-.125781	1	.121368	2	.999770
9.0	.192257	1	-.114777	2	-.130394	1	-.135053	1	.127839	2	.999795
9.5	.191853	1	-.121256	2	-.140194	1	-.144563	1	.134285	2	.999816
10.0	.191475	1	-.127711	2	-.150231	1	-.154309	1	.140707	2	.999834

ELECTRON Z = 26, A = 56

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.364921	1	-.330633		-.279980	- 1	-.994411	- 1	.129659	1	.934946
1.0	.258038	1	-.880329		-.755972	- 1	-.161203		.206971	1	.982472
1.5	.231418	1	-.152484	1	-.133333		-.222847		.280477	1	.992095
2.0	.220361	1	-.219970	1	-.196188		-.285733		.351890	1	.995530
2.5	.214441	1	-.288381	1	-.262518		-.350514		.422098	1	.997132
3.0	.210742	1	-.356991	1	-.331748		-.417485		.491525	1	.998006
3.5	.208177	1	-.425527	1	-.403654		-.486784		.560383	1	.998534
4.0	.206265	1	-.493874	1	-.478137		-.558476		.628785	1	.998877
4.5	.204764	1	-.561985	1	-.555147		-.632594		.696796	1	.999112
5.0	.203537	1	-.629838	1	-.634654		-.709155		.764457	1	.999281
5.5	.202505	1	-.697425	1	-.716641		-.788164		.831794	1	.999405
6.0	.201617	1	-.764744	1	-.801092		-.869621		.898827	1	.999500
6.5	.200837	1	-.831795	1	-.887998		-.953524		.965568	1	.999574
7.0	.200144	1	-.898579	1	-.977347		-.103987	1	.103203	2	.999633
7.5	.199519	1	-.965098	1	-.106913	1	-.112864	1	.109821	2	.999680
8.0	.198950	1	-.103135	2	-.116333	1	-.121985	1	.116413	2	.999719
8.5	.198429	1	-.109735	2	-.125995	1	-.131347	1	.122978	2	.999751
9.0	.197947	1	-.116309	2	-.135897	1	-.140950	1	.129517	2	.999778
9.5	.197499	1	-.122857	2	-.146039	1	-.150793	1	.136030	2	.999801
10.0	.197081	1	-.129380	2	-.156419	1	-.160875	1	.142518	2	.999820

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.383034	1	-.340310		-.298753	- 1	-.105709		.132699	1	.930367
1.0	.268599	1	-.899061		-.800203	- 1	-.170602		.210944	1	.981136
1.5	.240041	1	-.155324	1	-.140724		-.235332		.285355	1	.991483
2.0	.228148	1	-.223779	1	-.206729		-.301334		.357670	1	.995182
2.5	.221761	1	-.293140	1	-.276308		-.369274		.428766	1	.996909
3.0	.217755	1	-.362678	1	-.348862		-.439455		.499064	1	.997850
3.5	.214969	1	-.432116	1	-.424155		-.512017		.568773	1	.998419
4.0	.212888	1	-.501340	1	-.502083		-.587026		.638004	1	.998789
4.5	.211248	1	-.570304	1	-.582592		-.664517		.706824	1	.999043
5.0	.209907	1	-.638986	1	-.665654		-.744505		.775272	1	.999224
5.5	.203776	1	-.707380	1	-.751248		-.826995		.843377	1	.999359
6.0	.207800	1	-.775484	1	-.839361		-.911987		.911156	1	.999461
6.5	.206943	1	-.843298	1	-.929979		-.999479		.978624	1	.999541
7.0	.206180	1	-.910824	1	-.102309	1	-.108946	1	.104579	2	.999604
7.5	.205492	1	-.978066	1	-.111869	1	-.118194	1	.111266	2	.999655
8.0	.204866	1	-.104503	2	-.121676	1	-.127688	1	.117925	2	.999697
8.5	.204291	1	-.111171	2	-.131729	1	-.137430	1	.124555	2	.999731
9.0	.203759	1	-.117811	2	-.142028	1	-.147418	1	.131158	2	.999760
9.5	.203265	1	-.124423	2	-.152571	1	-.157651	1	.137733	2	.999785
10.0	.202803	1	-.131009	2	-.163357	1	-.168127	1	.144230	2	.999806

ELECTRON Z = 28, A = 60

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.402220	1	-.350399		-.318159	- 1	-.112236		.135840	1	.925685
1.0	.279797	1	-.918588		-.845314	- 1	-.180332		.215075	1	.979756
1.5	.249179	1	-.158286	1	-.148203		-.248182		.290436	1	.990849
2.0	.236393	1	-.227753	1	-.217327		-.317299		.363698	1	.994822
2.5	.229505	1	-.298109	1	-.290096		-.388366		.435727	1	.996676
3.0	.225171	1	-.368618	1	-.365881		-.461694		.506941	1	.997688
3.5	.222149	1	-.439003	1	-.444437		-.537424		.577545	1	.998300
4.0	.219883	1	-.509150	1	-.525655		-.615626		.647653	1	.998698
4.5	.218095	1	-.579013	1	-.609480		-.696334		.717328	1	.998971
5.0	.216629	1	-.648572	1	-.695881		-.779563		.786613	1	.999166
5.5	.215390	1	-.717822	1	-.784839		-.865319		.855534	1	.999311
6.0	.214321	1	-.786760	1	-.876339		-.953603		.924112	1	.999421
6.5	.213381	1	-.855389	1	-.970367		-.104441	1	.992361	1	.999506
7.0	.212542	1	-.923711	1	-.106691	1	-.113774	1	.106029	2	.999574
7.5	.211785	1	-.991730	1	-.116597	1	-.123357	1	.112791	2	.999629
8.0	.211096	1	-.105945	2	-.126751	1	-.133191	1	.119522	2	.999674
8.5	.210463	1	-.112687	2	-.137155	1	-.143274	1	.126224	2	.999711
9.0	.209877	1	-.119400	2	-.147805	1	-.153605	1	.132896	2	.999742
9.5	.209333	1	-.126083	2	-.158702	1	-.164183	1	.139538	2	.999769
10.0	.208824	1	-.132737	2	-.169844	1	-.175007	1	.146152	2	.999791

ELECTRON   Z = 29, A = 66

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.421874	1 -.360599	-.339128 - 1	-.118951	.138956 1	.920906
1.0	.291205	1 -.938087	-.894096 - 1	-.190374	.219156 1	.978331
1.5	.258447	1 -.161221	1 -.156338	-.261533	.295431 1	.990193
2.0	.244731	1 -.231668	1 -.228942	-.334027	.369594 1	.994448
2.5	.237319	1 -.302979	1 -.305331	-.408556	.442505 1	.996436
3.0	.232640	1 -.374413	1 -.384848	-.485436	.514576 1	.997521
3.5	.229367	1 -.445690	1 -.467235	-.564310	.586012 1	.998177
4.0	.226908	1 -.516698	1 -.552378	-.646748	.656923 1	.998603
4.5	.224962	1 -.587392	1 -.640221	-.731284	.727375 1	.998896
5.0	.223363	1 -.657753	1 -.730730	-.818434	.797411 1	.999105
5.5	.222011	1 -.727776	1 -.823884	-.908201	.867057 1	.999261
6.0	.220842	1 -.797459	1 -.919668	-.100059 1	.936335 1	.999379
6.5	.219813	1 -.866806	1 -.101807 1	-.109558 1	.100526 2	.999470
7.0	.218894	1 -.935820	1 -.111907 1	-.119318 1	.107384 2	.999543
7.5	.218064	2 -.100451	1 -.122267 1	-.129338 1	.114208 2	.999602
8.0	.217308	2 -.107286	1 -.132884 1	-.139617 1	.120999 2	.999650
8.5	.216613	2 -.114090	1 -.143758 1	-.150153 1	.127759 2	.999690
9.0	.215970	2 -.120862	1 -.154888 1	-.160946 1	.134486 2	.999724
9.5	.215372	2 -.127602	1 -.166272 1	-.171994 1	.141182 2	.999752
10.0	.214812	2 -.134311	1 -.177909 1	-.183296 1	.147846 2	.999776

ELECTRON Z = 30, A = 66

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.443107	1	-.371424		-.360335	- 1	-.125992		.142253	1	.916038
1.0	.303588	1	-.958923		-.942435	- 1	-.200802		.223524	1	.976864
1.5	.268521	1	-.164374	1	-.164279		-.275226		.300810	1	.989516
2.0	.253799	1	-.235890	1	-.240129		-.350963		.375973	1	.994062
2.5	.245818	1	-.308251	1	-.319817		-.428730		.449868	1	.996188
3.0	.240765	1	-.380708	1	-.402657		-.508849		.522903	1	.997348
3.5	.237219	1	-.452981	1	-.488381		-.591469		.595280	1	.998049
4.0	.234548	1	-.524960	1	-.576870		-.676660		.667111	1	.998506
4.5	.232431	1	-.596600	1	-.668067		-.764456		.738463	1	.998819
5.0	.230688	1	-.667882	1	-.761939		-.854875		.809377	1	.999043
5.5	.229212	1	-.738803	1	-.858463		-.947921		.879881	1	.999209
6.0	.227933	1	-.809363	1	-.957624		-.104359	1	.949997	1	.999335
6.5	.226807	1	-.879567	1	-.105941	1	-.114189	1	.101974	2	.999433
7.0	.225800	1	-.949417	1	-.116380	1	-.124279	1	.108912	2	.999511
7.5	.224891	1	-.101892	2	-.127079	1	-.134631	1	.115815	2	.999574
8.0	.224062	1	-.108808	2	-.138037	1	-.145241	1	.122683	2	.999626
8.5	.223299	1	-.115689	2	-.149253	1	-.156111	1	.129517	2	.999668
9.0	.222593	1	-.122538	2	-.160724	1	-.167237	1	.136317	2	.999704
9.5	.221936	1	-.129352	2	-.172450	1	-.178620	1	.143085	2	.999735
10.0	.221322	1	-.136134	2	-.184430	1	-.190257	1	.149820	2	.999760

p	F_o		f_1	g_1		f_{-1}		g_{-1}		Sin Δ
.5	.465085	1	-.382470	-.382931	- 1	-.133259		.145563	1	.911084
1.0	.316361	1	-.980001	-.993792	- 1	-.211570		.227906	1	.975353
1.5	.278880	1	-.167546	-.172733	1	-.289409		.306190	1	.988818
2.0	.263101	1	-.240122	-.252081	1	-.368578		.382334	1	.993663
2.5	.254521	1	-.313516	-.335359	1	-.449814		.457189	1	.995931
3.0	.249071	1	-.386976	-.421853	1	-.533445		.531157	1	.997169
3.5	.245237	1	-.460220	-.511283	1	-.619621		.604442	1	.997918
4.0	.242341	1	-.533138	-.603527	1	-.708414		.677155	1	.998405
4.5	.240041	1	-.605686	-.698524	1	-.799861		.749362	1	.998739
5.0	.238144	1	-.677849	-.796240	1	-.893976		.821106	1	.998978
5.5	.236535	1	-.749623	-.896653	1	-.990764		.892416	1	.999155
6.0	.235140	1	-.821010	-.999747	1	-.109023	1	.963314	1	.999290
6.5	.233910	1	-.892014	-.110551	1	-.119235	1	.103381	2	.999395
7.0	.232810	1	-.962641	-.121392	1	-.129714	1	.110393	2	.999478
7.5	.231816	1	-.103290 (2)	-.132497	1	-.140458	1	.117367	2	.999545
8.0	.230908	1	-.110278 (2)	-.143866	1	-.151465	1	.124304	2	.999600
8.5	.230073	1	-.117231 (2)	-.155495	1	-.162736	1	.131205	2	.999646
9.0	.229300	1	-.124147 (2)	-.167385	1	-.174267	1	.138070	2	.999684
9.5	.228581	1	-.131028 (2)	-.179534	1	-.186059	1	.144901	2	.999717
10.0	.227907	1	-.137874 (2)	-.191940	1	-.198110	1	.151696	2	.999744

ELECTRON Z = 32, A = 70

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.488413	1	-.394000		-.406372	- 1	-.140829		.148989	1	.906051
1.0	.329934	1	-.100200	1	-.104644		-.222740		.232468	1	.973800
1.5	.289880	1	-.170860	1	-.181339		-.304047		.311802	1	.988097
2.0	.272971	1	-.244544	1	-.264178		-.386669		.388978	1	.993252
2.5	.263748	1	-.319022	1	-.351011		-.471364		.464842	1	.995666
3.0	.257873	1	-.393533	1	-.441093		-.558466		.539795	1	.996984
3.5	.253727	1	-.467798	1	-.534134		-.648130		.614038	1	.997782
4.0	.250590	1	-.541706	1	-.630008		-.740429		.687684	1	.998300
4.5	.248092	1	-.615215	1	-.728653		-.835399		.760800	1	.998656
5.0	.246029	1	-.688311	1	-.830033		-.933057		.833427	1	.998911
5.5	.244277	1	-.760991	1	-.934128		-.103341	1	.905598	1	.999100
6.0	.242757	1	-.833260	1	-.104092	1	-.113645	1	.977333	1	.999243
6.5	.241414	1	-.905121	1	-.115039	1	-.124218	1	.104865	2	.999355
7.0	.240213	1	-.976582	1	-.126254	1	-.135058	1	.111956	2	.999444
7.5	.239126	1	-.104765	2	-.137734	1	-.146165	1	.119007	2	.999516
8.0	.238134	1	-.111833	2	-.149478	1	-.157539	1	.126020	2	.999574
8.5	.237221	1	-.118862	2	-.161486	1	-.169176	1	.132994	2	.999623
9.0	.236376	1	-.125853	2	-.173755	1	-.181077	1	.139931	2	.999664
9.5	.235588	1	-.132807	2	-.186284	1	-.193239	1	.146831	2	.999698
10.0	.234851	1	-.139724	2	-.199073	1	-.205662	1	.153694	2	.999727

ELECTRON Z = 33, A = 75

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.512391	1	-.405695		-.431387	- 1	-.148610		.152401	1	.900945
1.0	.343827	1	-.102408	1	-.110251		-.234241		.236998	1	.972206
1.5	.301096	1	-.174162	1	-.190532		-.319179		.317353	1	.987356
2.0	.283007	1	-.248929	1	-.277161		-.405471		.395522	1	.992829
2.5	.273110	1	-.324455	1	-.367898		-.493894		.472350	1	.995392
3.0	.266786	1	-.399978	1	-.461967		-.584790		.548236	1	.996794
3.5	.262313	1	-.475215	1	-.559068		-.678314		.623380	1	.997641
4.0	.253919	1	-.550059	1	-.659069		-.774542		.697896	1	.998193
4.5	.256213	1	-.624469	1	-.761907		-.873508		.771850	1	.998571
5.0	.253974	1	-.698431	1	-.867545		-.975230		.845285	1	.998842
5.5	.252070	1	-.771946	1	-.975961		-.107971	1	.918234	1	.999043
6.0	.250416	1	-.845016	1	-.108714	1	-.118695	1	.990719	1	.999195
6.5	.248955	1	-.917650	1	-.120106	1	-.129694	1	.106276	2	.999314
7.0	.247646	1	-.989853	1	-.131771	1	-.140967	1	.113436	2	.999409
7.5	.246461	1	-.106163	2	-.143708	1	-.152514	1	.120554	2	.999485
8.0	.245379	1	-.113300	2	-.155915	1	-.164332	1	.127631	2	.999547
8.5	.244383	1	-.120395	2	-.168392	1	-.176421	1	.134666	2	.999599
9.0	.243460	1	-.127449	2	-.181135	1	-.188779	1	.141662	2	.999642
9.5	.242601	1	-.134464	2	-.194145	1	-.201405	1	.148618	2	.999679
10.0	.241796	1	-.141439	2	-.207420	1	-.214297	1	.155535	2	.999710

ELECTRON Z = 34, A = 77

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.537990	1	-.417964		-.457246	- 1	-.156733		.155958	1	.895772
1.0	.358687	1	-.104728	1	-.115974		-.246190		.241754	1	.970571
1.5	.313092	1	-.177639	1	-.199836		-.334802		.323197	1	.986594
2.0	.293736	1	-.253551	1	-.290208		-.424762		.402425	1	.992392
2.5	.283113	1	-.330192	1	-.384760		-.516867		.480285	1	.995111
3.0	.276306	1	-.406792	1	-.482685		-.611466		.557172	1	.996597
3.5	.271479	1	-.483071	1	-.583671		-.708719		.633288	1	.997497
4.0	.267808	1	-.558920	1	-.687584		-.808700		.708745	1	.998082
4.5	.264876	1	-.634302	1	-.794357		-.911448		.783611	1	.998483
5.0	.262446	1	-.709204	1	-.903956		-.101698	1	.857931	1	.998771
5.5	.260378	1	-.783628	1	-.101636	1	-.112529	1	.931737	1	.998984
6.0	.258579	1	-.857579	1	-.113154	1	-.123640	1	.100505	2	.999146
6.5	.256989	1	-.931065	1	-.124949	1	-.135028	1	.107789	2	.999272
7.0	.255564	1	-.100409	2	-.137020	1	-.146693	1	.115028	2	.999372
7.5	.254273	1	-.107667	2	-.149365	1	-.158633	1	.122222	2	.999453
8.0	.253093	1	-.114881	2	-.161983	1	-.170848	1	.129372	2	.999519
8.5	.252007	1	-.122052	2	-.174872	1	-.183337	1	.136479	2	.999574
9.0	.251001	1	-.129179	2	-.188030	1	-.196097	1	.143543	2	.999620
9.5	.250063	1	-.136264	2	-.201457	1	-.209127	1	.150566	2	.999659
10.0	.249185	1	-.143307	2	-.215150	1	-.222425	1	.157548	2	.999692

ELECTRON Z = 35, A = 81

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.564590	1	-.430528		-.484545	-1	-.165115		.159546	1	.890535
1.0	.374094	1	-.107037	1	-.121984		-.258516		.246552	1	.968895
1.5	.325494	1	-.181158	1	-.209601		-.350933		.329079	1	.985811
2.0	.304804	1	-.258215	1	-.303915		-.444712		.409358	1	.991944
2.5	.293414	1	-.335963	1	-.402502		-.540675		.488234	1	.994822
3.0	.286095	1	-.413629	1	-.504524		-.639176		.566104	1	.996395
3.5	.280892	1	-.490933	1	-.609659		-.740378		.643169	1	.997348
4.0	.276927	1	-.567767	1	-.717768		-.844357		.719540	1	.997968
4.5	.273754	1	-.644096	1	-.828784		-.951152		.795287	1	.998393
5.0	.271122	1	-.719910	1	-.942670		-.106078	1	.870457	1	.998698
5.5	.268878	1	-.795211	1	-.105940	1	-.117324	1	.945081	1	.998923
6.0	.266925	1	-.870006	1	-.117896	1	-.128853	1	.101919	2	.999095
6.5	.265197	1	-.944305	1	-.130134	1	-.140665	1	.109279	2	.999229
7.0	.263648	1	-.101812	2	-.142651	1	-.152759	1	.116590	2	.999335
7.5	.262244	1	-.109145	2	-.155446	1	-.165133	1	.123855	2	.999421
8.0	.260960	1	-.116431	2	-.168519	1	-.177786	1	.131072	2	.999491
8.5	.259778	1	-.123671	2	-.181866	1	-.190717	1	.138244	2	.999549
9.0	.258683	1	-.130865	2	-.195488	1	-.203923	1	.145371	2	.999598
9.5	.257662	1	-.138014	2	-.209382	1	-.217404	1	.152454	2	.999639
10.0	.256706	1	-.145119	2	-.223546	1	-.231157	1	.159493	2	.999674

ELECTRON Z = 36, A = 84

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.592697	1	-.443585		-.513029	- 1	-.173826		.163239	1	.885242
1.0	.390376	1	-.109535	1	-.128196		-.271292		.251509	1	.967180
1.5	.338586	1	-.184805	1	-.219644		-.367601		.335163	1	.985007
2.0	.316473	1	-.263047	1	-.317962		-.465267		.416530	1	.991483
2.5	.304265	1	-.341941	1	-.420628		-.565137		.496460	1	.994524
3.0	.296398	1	-.420710	1	-.526776		-.667575		.575347	1	.996188
3.5	.290791	1	-.499074	1	-.636071		-.772744		.653394	1	.997195
4.0	.286510	1	-.576929	1	-.748372		-.880725		.730713	1	.997850
4.5	.283079	1	-.654239	1	-.863609		-.991554		.807375	1	.998300
5.0	.280228	1	-.730998	1	-.981747		-.110525	1	.883427	1	.998622
5.5	.277796	1	-.807210	1	-.110276	1	-.122181	1	.958904	1	.998861
6.0	.275676	1	-.882883	1	-.122663	1	-.134124	1	.103383	2	.999043
6.5	.273800	1	-.958028	1	-.135334	1	-.146353	1	.110823	2	.999184
7.0	.272117	1	-.103265	2	-.148289	1	-.158867	1	.118211	2	.999296
7.5	.270592	1	-.110677	2	-.161524	1	-.171665	1	.125548	2	.999387
8.0	.269196	1	-.118039	2	-.175039	1	-.184744	1	.132837	2	.999461
8.5	.267911	1	-.125352	2	-.188832	1	-.198105	1	.140078	2	.999523
9.0	.266719	1	-.132617	2	-.202902	1	-.211744	1	.147271	2	.999574
9.5	.265609	1	-.139834	2	-.217247	1	-.225661	1	.154417	2	.999618
10.0	.264568	1	-.147004	2	-.231864	1	-.239852	1	.161517	2	.999655

ELECTRON Z = 37, A = 87

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.622245	1	-.457092		-.542865 - 1		-.182856		.167017	1	.879897
1.0	.407483	1	-.112057	1	-.134653		-.284514		.256592	1	.965426
1.5	.352316	1	-.188558	1	-.230047		-.384821		.341400	1	.984182
2.0	.328694	1	-.268009	1	-.332479		-.486474		.423878	1	.991009
2.5	.315614	1	-.348073	1	-.439333		-.590348		.504880	1	.994218
3.0	.307161	1	-.427966	1	-.549709		-.696814		.584803	1	.995974
3.5	.301123	1	-.507409	1	-.663264		-.806040		.663847	1	.997037
4.0	.295504	1	-.586301	1	-.779852		-.918107		.742127	1	.997729
4.5	.292796	1	-.664608	1	-.899403		-.103305	1	.819716	1	.998205
5.0	.289711	1	-.742326	1	-.102188	1	-.115090	1	.896661	1	.998545
5.5	.287076	1	-.819460	1	-.114726	1	-.127164	1	.972999	1	.998797
6.0	.284779	1	-.896021	1	-.127552	1	-.139528	1	.104875	2	.998989
6.5	.282744	1	-.972021	1	-.140665	1	-.152181	1	.112395	2	.999138
7.0	.280918	1	-.104747	2	-.154064	1	-.165123	1	.119860	2	.999257
7.5	.279261	1	-.112238	2	-.167746	1	-.178350	1	.127272	2	.999353
8.0	.277746	1	-.119677	2	-.181711	1	-.191863	1	.134632	2	.999431
8.5	.276350	1	-.127063	2	-.195957	1	-.205659	1	.141942	2	.999496
9.0	.275055	1	-.134398	2	-.210481	1	-.219737	1	.149201	2	.999550
9.5	.273848	1	-.141683	2	-.225282	1	-.234095	1	.156411	2	.999596
10.0	.272718	1	-.148918	2	-.240359	1	-.248731	1	.163572	2	.999636

ELECTRON Z = 38, A = 88

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.653701	1	-.471215		-.573945	- 1	-.192272		.170937	1	.874505
1.0	.425711	1	-.114694	1	-.141313		-.298262		.261893	1	.963634
1.5	.366937	1	-.192483	1	-.240712		-.402654		.347918	1	.983337
2.0	.341696	1	-.273203	1	-.347293		-.508350		.431565	1	.990524
2.5	.327678	1	-.354494	1	-.458339		-.616254		.513698	1	.993904
3.0	.318596	1	-.435569	1	-.572921		-.726747		.594713	1	.995755
3.5	.312093	1	-.516150	1	-.690684		-.840001		.674813	1	.996876
4.0	.307109	1	-.596136	1	-.811480		-.956099		.754113	1	.997605
4.5	.303102	1	-.675499	1	-.935240		-.107508	1	.832688	1	.998107
5.0	.299764	1	-.754234	1	-.106193	1	-.119697	1	.910587	1	.998466
5.5	.296911	1	-.832351	1	-.119152	1	-.132176	1	.987846	1	.998731
6.0	.294421	1	-.909862	1	-.132399	1	-.144945	1	.106449	2	.998934
6.5	.292215	1	-.986780	1	-.145934	1	-.158005	1	.114055	2	.999091
7.0	.290233	1	-.106312	2	-.159754	1	-.171353	1	.121604	2	.999216
7.5	.288436	1	-.113889	2	-.173859	1	-.184988	1	.129097	2	.999317
8.0	.286791	1	-.121410	2	-.188246	1	-.198909	1	.136536	2	.999400
8.5	.285275	1	-.128877	2	-.202914	1	-.213114	1	.143921	2	.999468
9.0	.283869	1	-.136290	2	-.217861	1	-.227601	1	.151254	2	.999526
9.5	.282558	1	-.143650	2	-.233085	1	-.242369	1	.158535	2	.999574
10.0	.281331	1	-.150958	2	-.248586	1	-.257415	1	.165764	2	.999616

ELECTRON Z = 38, A = 91

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.686412	1	-.485681		-.606692	- 1	-.201979		.174893	1	.869071
1.0	.444627	1	-.117376	1	-.148295		-.312435		.267241	1	.961805
1.5	.382066	1	-.196457	1	-.251882		-.421049		.354479	1	.982472
2.0	.355120	1	-.278444	1	-.362815		-.530944		.439284	1	.990026
2.5	.340112	1	-.360954	1	-.478278		-.643055		.522531	1	.993582
3.0	.330363	1	-.443198	1	-.597308		-.757772		.604617	1	.995530
3.5	.323367	1	-.524897	1	-.719542		-.875272		.685747	1	.996710
4.0	.317995	1	-.605956	1	-.844829		-.995640		.766037	1	.997478
4.5	.313670	1	-.686346	1	-.973097		-.111892	1	.845563	1	.998006
5.0	.310064	1	-.766068	1	-.110431	1	-.124512	1	.924377	1	.998384
5.5	.306978	1	-.845132	1	-.123845	1	-.137426	1	.100252	2	.998664
6.0	.304283	1	-.923552	1	-.137549	1	-.150633	1	.108001	2	.998877
6.5	.301894	1	-.100134	2	-.151543	1	-.164132	1	.115688	2	.999043
7.0	.299748	1	-.107852	2	-.165824	1	-.177922	1	.123315	2	.999174
7.5	.297800	1	-.115510	2	-.180391	1	-.192001	1	.130884	2	.999281
8.0	.296017	1	-.123109	2	-.195243	1	-.206369	1	.138394	2	.999368
8.5	.294374	1	-.130650	2	-.210378	1	-.221024	1	.145849	2	.999440
9.0	.292850	1	-.138134	2	-.225793	1	-.235962	1	.153248	2	.999500
9.5	.291428	1	-.145563	2	-.241488	1	-.251184	1	.160593	2	.999552
10.0	.290097	1	-.152937	2	-.257461	1	-.265685	1	.167884	2	.999595

ELECTRON Z = 40, A = 90

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.721740	1	-.500990		-.640695	- 1	-.212175		.179068	1	.863600
1.0	.465104	1	-.120226	1	-.155461		-.327263		.272927	1	.959939
1.5	.398451	1	-.200691	1	-.263256		-.440186		.361480	1	.981586
2.0	.369657	1	-.284041	1	-.378509		-.554305		.447546	1	.989516
2.5	.353573	1	-.367870	1	-.498303		-.670593		.532010	1	.993252
3.0	.343098	1	-.451383	1	-.621645		-.789452		.615272	1	.995300
3.5	.335566	1	-.534306	1	-.748162		-.911065		.697539	1	.996540
4.0	.329772	1	-.616544	1	-.877701		-.103552	1	.778931	1	.997348
4.5	.325100	1	-.698072	1	-.101019	1	-.116286	1	.859523	1	.997903
5.0	.321201	1	-.778894	1	-.114560	1	-.129310	1	.939371	1	.998300
5.5	.317862	1	-.859022	1	-.128391	1	-.142626	1	.101851	2	.998595
6.0	.314944	1	-.938473	1	-.142509	1	-.156233	1	.109698	2	.998819
6.5	.312355	1	-.101726	2	-.156915	1	-.170130	1	.117480	2	.998993
7.0	.310029	1	-.109541	2	-.171605	1	-.184317	1	.125198	2	.999132
7.5	.307918	1	-.117293	2	-.186580	1	-.198791	1	.132856	2	.999243
8.0	.305985	1	-.124983	2	-.201837	1	-.213552	1	.140453	2	.999335
8.5	.304203	1	-.132613	2	-.217375	1	-.228597	1	.147992	2	.999411
9.0	.302550	1	-.140184	2	-.233191	1	-.243925	1	.155473	2	.999474
9.5	.301008	1	-.147696	2	-.249285	1	-.259534	1	.162897	2	.999528
10.0	.299564	1	-.155151	2	-.265655	1	-.275422	1	.170266	2	.999574

ELECTRON Z = 41, A = 95

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.757537	1	-.516318		-.676792	-1	-.222541		.183149	1	.858097
1.0	.485748	1	-.123037	1	-.163061		-.342378		.278455	1	.958037
1.5	.414888	1	-.204828	1	-.275358		-.459781		.368244	1	.980681
2.0	.384185	1	-.289469	1	-.395296		-.578366		.455479	1	.988994
2.5	.366986	1	-.374532	1	-.519853		-.699143		.541058	1	.992914
3.0	.355757	1	-.459220	1	-.648002		-.822525		.625385	1	.995063
3.5	.347665	1	-.543259	1	-.779362		-.948698		.708668	1	.996366
4.0	.341431	1	-.626560	1	-.913776		-.107775	1	.791029	1	.997214
4.5	.336397	1	-.709100	1	-.105118	1	-.120973	1	.872547	1	.997797
5.0	.332192	1	-.790886	1	-.119153	1	-.134466	1	.953277	1	.998214
5.5	.328587	1	-.871932	1	-.133481	1	-.148254	1	.103326	2	.998524
6.0	.325437	1	-.952257	1	-.148100	1	-.162337	1	.111253	2	.998759
6.5	.322639	1	-.103188	2	-.163009	1	-.176714	1	.119111	2	.998942
7.0	.320125	1	-.111082	2	-.178208	1	-.191385	1	.126903	2	.999088
7.5	.317843	1	-.118909	2	-.193693	1	-.206347	1	.134629	2	.999205
8.0	.315753	1	-.126671	2	-.209464	1	-.221600	1	.142292	2	.999301
8.5	.313825	1	-.134369	2	-.225519	1	-.237141	1	.149894	2	.999381
9.0	.312037	1	-.142005	2	-.241856	1	-.252968	1	.157434	2	.999448
9.5	.310370	1	-.149579	2	-.258474	1	-.269079	1	.164914	2	.999504
10.0	.308808	1	-.157092	2	-.275370	1	-.285473	1	.172335	2	.999553

ELECTRON Z = 42, A = 95

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.796506	1	-.532648		-.714262	- 1	-.233474		.187499	1	.852565
1.0	.508289	1	-.126049	1	-.170858		-.358253		.284394	1	.956099
1.5	.432851	1	-.209280	1	-.287666		-.480230		.375548	1	.979756
2.0	.400066	1	-.295331	1	-.412234		-.603301		.464079	1	.988460
2.5	.381650	1	-.381752	1	-.541432		-.728520		.550902	1	.992568
3.0	.369596	1	-.467742	1	-.674205		-.856311		.636426	1	.994822
3.5	.360892	1	-.553029	1	-.810161		-.986868		.720861	1	.996188
4.0	.354176	1	-.637527	1	-.949144		-.112029	1	.804333	1	.997077
4.5	.348746	1	-.721219	1	-.109109	1	-.125661	1	.886922	1	.997688
5.0	.344206	1	-.804112	1	-.123595	1	-.139586	1	.968685	1	.998126
5.5	.340311	1	-.886226	1	-.138373	1	-.153805	1	.104967	2	.998451
6.0	.336905	1	-.967581	1	-.153439	1	-.168318	1	.112990	2	.998698
6.5	.333880	1	-.104820	2	-.168794	1	-.183124	1	.120942	2	.998890
7.0	.331160	1	-.112810	2	-.184436	1	-.198222	1	.128823	2	.999043
7.5	.328690	1	-.120730	2	-.200363	1	-.213610	1	.136637	2	.999166
8.0	.326428	1	-.128581	2	-.216573	1	-.229287	1	.144384	2	.999267
8.5	.324342	1	-.136366	2	-.233066	1	-.245251	1	.152067	2	.999351
9.0	.322407	1	-.144085	2	-.249840	1	-.261500	1	.159686	2	.999421
9.5	.320602	1	-.151740	2	-.266892	1	-.278032	1	.167242	2	.999480
10.0	.318912	1	-.159331	2	-.284221	1	-.294845	1	.174737	2	.999531

ELECTRON Z = 43, A = 99

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.836481	1	-.549171		-.753788	- 1	-.244649		.191812	1	.847010
1.0	.531331	1	-.129063	1	-.179054		-.374500		.290267	1	.954127
1.5	.451143	1	-.213703	1	-.300616		-.501205		.382738	1	.978811
2.0	.416188	1	-.301122	1	-.430097		-.628957		.472508	1	.987914
2.5	.396498	1	-.388849	1	-.564262		-.758855		.560510	1	.992214
3.0	.383580	1	-.476079	1	-.702022		-.891336		.647157	1	.994574
3.5	.374233	1	-.562545	1	-.842978		-.102660	1	.732663	1	.996005
4.0	.367010	1	-.648164	1	-.986971		-.116474	1	.817156	1	.996937
4.5	.361164	1	-.732922	1	-.113393	1	-.130581	1	.900720	1	.997578
5.0	.356271	1	-.816831	1	-.128383	1	-.144984	1	.983413	1	.998036
5.5	.352071	1	-.899912	1	-.143666	1	-.159682	1	.106528	2	.998376
6.0	.348395	1	-.982189	1	-.159239	1	-.174676	1	.114636	2	.998635
6.5	.345130	1	-.106369	2	-.175101	1	-.189966	1	.122668	2	.998837
7.0	.342194	1	-.114442	2	-.191252	1	-.205550	1	.130627	2	.998997
7.5	.339526	1	-.122442	2	-.207690	1	-.221426	1	.138514	2	.999126
8.0	.337084	1	-.130369	2	-.224414	1	-.237593	1	.146331	2	.999232
8.5	.334830	1	-.138226	2	-.241421	1	-.254050	1	.154080	2	.999319
9.0	.332740	1	-.146014	2	-.258710	1	-.270793	1	.161762	2	.999393
9.5	.330791	1	-.153734	2	-.276279	1	-.287822	1	.169378	2	.999455
10.0	.328965	1	-.161387	2	-.294127	1	-.305133	1	.176929	2	.999508

ELECTRON Z = 44, A = 101

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.879187	1	-.566483		-.795085	-1	-.256319		.196304	1	.841434
1.0	.555965	1	-.132222	1	-.187545		-.391430		.296409	1	.952121
1.5	.470683	1	-.218340	1	-.313959		-.522990		.390272	1	.977847
2.0	.433396	1	-.307197	1	-.448425		-.655513		.481349	1	.987356
2.5	.412335	1	-.396298	1	-.587597		-.790150		.570598	1	.991853
3.0	.398484	1	-.484837	1	-.730356		-.927351		.658435	1	.994321
3.5	.388443	1	-.572550	1	-.876294		-.106732	1	.745080	1	.995818
4.0	.380673	1	-.659358	1	-.102525	1	-.121017	1	.830662	1	.996794
4.5	.374376	1	-.745250	1	-.117717	1	-.135594	1	.915269	1	.997464
5.0	.369102	1	-.830244	1	-.133200	1	-.150465	1	.998962	1	.997944
5.5	.364572	1	-.914362	1	-.148975	1	-.165633	1	.108179	2	.998300
6.0	.360606	1	-.997632	1	-.165040	1	-.181096	1	.116379	2	.998571
6.5	.357081	1	-.108008	2	-.181393	1	-.196854	1	.124499	2	.998782
7.0	.353911	1	-.116173	2	-.198034	1	-.212907	1	.132542	2	.998950
7.5	.351030	1	-.124260	2	-.214962	1	-.229252	1	.140509	2	.999085
8.0	.348392	1	-.132271	2	-.232174	1	-.245889	1	.148404	2	.999195
8.5	.345959	1	-.140208	2	-.249669	1	-.262814	1	.156227	2	.999287
9.0	.343701	1	-.148072	2	-.267446	1	-.280026	1	.163980	2	.999364
9.5	.341596	1	-.155866	2	-.285503	1	-.297523	1	.171664	2	.999429
10.0	.339623	1	-.163589	2	-.303836	1	-.315303	1	.179280	2	.999485

ELECTRON $Z = 45$, $A = 103$

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.924225	1	-.584418		-.838371	-1	-.268420		.200908	1	.835843
1.0	.581925	1	-.135483	1	-.196386		-.408969		.302716	1	.950082
1.5	.491240	1	-.223117	1	-.327806		-.545526		.398004	1	.976864
2.0	.451469	1	-.313445	1	-.467404		-.682951		.490418	1	.986786
2.5	.428944	1	-.403949	1	-.611725		-.822449		.580936	1	.991483
3.0	.414096	1	-.493823	1	-.759616		-.964488		.669985	1	.994062
3.5	.403314	1	-.582805	1	-.910664		-.110928	1	.757785	1	.995627
4.0	.394957	1	-.670821	1	-.106471	1	-.125693	1	.844473	1	.996647
4.5	.388178	1	-.757866	1	-.122169	1	-.140750	1	.930136	1	.997348
5.0	.382495	1	-.843959	1	-.138157	1	-.156101	1	.101484	2	.997850
5.5	.377611	1	-.929128	1	-.154435	1	-.171747	1	.109863	2	.998222
6.0	.373334	1	-.101340	2	-.171002	1	-.187688	1	.118156	2	.998506
6.5	.369532	1	-.109681	2	-.187856	1	-.203925	1	.126365	2	.998726
7.0	.366111	1	-.117938	2	-.204996	1	-.220455	1	.134493	2	.998901
7.5	.363002	1	-.126112	2	-.222422	1	-.237277	1	.142542	2	.999043
8.0	.360155	1	-.134208	2	-.240132	1	-.254390	1	.150514	2	.999159
8.5	.357528	1	-.142225	2	-.258124	1	-.271792	1	.158412	2	.999255
9.0	.355091	1	-.150167	2	-.276396	1	-.289480	1	.166236	2	.999335
9.5	.352819	1	-.158034	2	-.294947	1	-.307452	1	.173988	2	.999403
10.0	.350691	1	-.165827	2	-.313774	1	-.325707	1	.181669	2	.999461

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.971385	1	-.602883		-.883774	- 1	-.280916		.205586	1	.830240
1.0	.609071	1	-.138821	1	-.205604		-.427073		.309126	1	.948011
1.5	.512685	1	-.227990	1	-.342208		-.568772		.405853	1	.975861
2.0	.470285	1	-.319802	1	-.487122		-.711245		.499607	1	.986205
2.5	.446206	1	-.411717	1	-.636777		-.855754		.591394	1	.991105
3.0	.430298	1	-.502927	1	-.789991		-.100278	1	.681647	1	.993798
3.5	.418726	1	-.593175	1	-.946341		-.115256	1	.770594	1	.995432
4.0	.409744	1	-.682392	1	-.110567	1	-.130519	1	.858373	1	.996497
4.5	.402452	1	-.770577	1	-.126792	1	-.146072	1	.945075	1	.997229
5.0	.396333	1	-.857754	1	-.143306	1	-.161920	1	.103077	2	.997754
5.5	.391073	1	-.943955	1	-.160108	1	-.178063	1	.111551	2	.998143
6.0	.386464	1	-.102921	2	-.177198	1	-.194502	1	.119933	2	.998439
6.5	.382365	1	-.111355	2	-.194574	1	-.211235	1	.128228	2	.998669
7.0	.378677	1	-.119701	2	-.212236	1	-.228262	1	.136437	2	.998852
7.5	.375325	1	-.127961	2	-.230183	1	-.245582	1	.144564	2	.999000
8.0	.372255	1	-.136137	2	-.248414	1	-.263193	1	.152610	2	.999121
8.5	.369423	1	-.144231	2	-.266926	1	-.281092	1	.160578	2	.999221
9.0	.366796	1	-.152246	2	-.285718	1	-.299278	1	.168469	2	.999305
9.5	.364346	1	-.160182	2	-.304788	1	-.317748	1	.176285	2	.999376
10.0	.362051	1	-.168042	2	-.324134	1	-.336500	1	.184026	2	.999437

ELECTRON Z = 47, A = 109

p	F_0		f_1		g_1	f_{-1}		g_{-1}		Sin Δ
.5	.102112	2	-.622009	-1	-.931347	-.293869		.210380	1	.824629
1.0	.637679	1	-.142267	1	-.215199	-.445822		.315705	1	.945908
1.5	.535244	1	-.233009	1	-.357149	-.592812		.413905	1	.974840
2.0	.490045	1	-.326338	1	-.507534	-.740467		.509027	1	.985612
2.5	.464308	1	-.419692	1	-.662670	-.890113		.602106	1	.990720
3.0	.447268	1	-.512263	1	-.821343	-.104226	1	.693584	1	.993528
3.5	.434851	1	-.603798	1	-.983125	-.119712	1	.783693	1	.995233
4.0	.425201	1	-.694235	2	-.114786	-.135483	1	.872577	1	.996344
4.5	.417359	1	-.783576	2	-.131549	-.151544	1	.960330	1	.997108
5.0	.410774	1	-.871852	2	-.148599	-.167899	1	.104702	2	.997655
5.5	.405110	1	-.959095	2	-.165936	-.184548	1	.113271	2	.998061
6.0	.400146	2	-.104534	2	-.183559	-.201492	1	.121744	2	.998370
6.5	.395730	2	-.113063	2	-.201467	-.218731	1	.130125	2	.998611
7.0	.391756	2	-.121498	2	-.219661	-.236263	1	.138417	2	.998802
7.5	.388145	2	-.129843	2	-.238137	-.254088	1	.146621	2	.998956
8.0	.384837	2	-.138100	2	-.256896	-.272203	1	.154742	2	.999082
8.5	.381785	2	-.146272	2	-.275936	-.290607	1	.162780	2	.999187
9.0	.378954	2	-.154359	2	-.295255	-.309297	1	.170737	2	.999275
9.5	.376314	2	-.162365	2	-.314851	-.328271	1	.178616	2	.999349
10.0	.373842	2	-.170290	2	-.334721	-.347527	1	.186417	2	.999412

ELECTRON Z = 48, A = 110

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.107442	2	-.642084		-.981176	- 1	-.307418		.215387	1	.819013
1.0	.668348	1	-.145884	1	-.225174		-.465400		.322599	1	.943775
1.5	.559409	1	-.238280	1	-.372605		-.617845		.422358	1	.973800
2.0	.511193	1	-.333206	1	-.528568		-.770805		.518927	1	.985007
2.5	.483666	1	-.428078	1	-.689259		-.925679		.613374	1	.990326
3.0	.465402	1	-.522088	1	-.853437		-.108299	1	.706153	1	.993252
3.5	.452070	1	-.614987	1	-.102067	1	-.124299	1	.797501	1	.995029
4.0	.441698	1	-.706720	1	-.119080	1	-.140578	1	.887565	1	.996188
4.5	.433260	1	-.797295	1	-.136377	1	-.157145	1	.976446	1	.996984
5.0	.426171	1	-.886745	1	-.153958	1	-.174001	1	.106422	2	.997555
5.5	.420071	1	-.975110	1	-.171821	1	-.191150	1	.115094	2	.997978
6.0	.414722	1	-.106243	2	-.189966	1	-.208591	1	.123665	2	.998300
6.5	.409964	1	-.114874	2	-.208392	1	-.226324	1	.132140	2	.998551
7.0	.405681	1	-.123407	2	-.227101	1	-.244348	1	.140522	2	.998750
7.5	.401789	1	-.131845	2	-.246089	1	-.262663	1	.148813	2	.998911
8.0	.398223	1	-.140192	2	-.265357	1	-.281265	1	.157016	2	.999043
8.5	.394934	1	-.148449	2	-.284903	1	-.300153	1	.165133	2	.999152
9.0	.391883	1	-.156618	2	-.304725	1	-.319326	1	.173166	2	.999243
9.5	.389038	1	-.164702	2	-.324821	1	-.338780	1	.181117	2	.999321
10.0	.386374	1	-.172702	2	-.345189	1	-.358514	1	.188987	2	.999387

ELECTRON   Z = 49, A = 115

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.112900	2	-.662353		-.103343		-.321216		.220333	1	.813395
1.0	.699647	1	-.149495	1	-.235590		-.485355		.329390	1	.941611
1.5	.583973	1	-.243501	1	-.388740		-.643394		.430646	1	.972742
2.0	.532619	1	-.339967	1	-.550550		-.801832		.528587	1	.984390
2.5	.503224	1	-.436289	1	-.717102		-.962144		.624319	1	.989925
3.0	.483681	1	-.531658	1	-.887121		-.112488	1	.718304	1	.992971
3.5	.469392	1	-.625834	1	-.106017	1	-.129028	1	.810789	1	.994822
4.0	.458262	1	-.718765	1	-.123610	1	-.145848	1	.901923	1	.996028
4.5	.449200	1	-.810468	1	-.141485	1	-.162955	1	.991813	1	.996858
5.0	.441583	1	-.900978	1	-.159642	1	-.180353	1	.108054	2	.997452
5.5	.435025	1	-.990342	1	-.178080	1	-.198042	1	.116815	2	.997893
6.0	.429273	1	-.107860	2	-.196800	1	-.216025	1	.125471	2	.998229
6.5	.424156	1	-.116579	2	-.215801	1	-.234300	1	.134025	2	.998490
7.0	.419549	1	-.125196	2	-.235082	1	-.232867	1	.142481	2	.998698
7.5	.415363	1	-.133712	2	-.254644	1	-.271724	1	.150842	2	.998865
8.0	.411527	1	-.142132	2	-.274484	1	-.290870	1	.159111	2	.999003
8.5	.407990	1	-.150457	2	-.294602	1	-.310303	1	.167289	2	.999116
9.0	.404708	1	-.158691	2	-.314996	1	-.330020	1	.175379	2	.999212
9.5	.401649	1	-.166835	2	-.335663	1	-.350019	1	.183383	2	.999292
10.0	.398785	1	-.174890	2	-.356602	1	-.370298	1	.191301	2	.999361

ELECTRON Z = 50, A = 116

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.118842	2	-.683915		-.108820		-.335784		.225600	1	.807779
1.0	.733779	1	-.153352	1	-.246417		-.506374		.336660	1	.939418
1.5	.610767	1	-.249095	1	-.405409		-.670197		.439551	1	.971665
2.0	.555987	1	-.347233	1	-.573138		-.834238		.539000	1	.983762
2.5	.524552	1	-.445136	1	-.745568		-.100005	1	.636150	1	.989516
3.0	.503608	1	-.541998	1	-.921394		-.116822	1	.731478	1	.992685
3.5	.488273	1	-.637586	1	-.110018	1	-.133900	1	.825238	1	.994610
4.0	.476314	1	-.731854	1	-.128177	1	-.151252	1	.917584	1	.995865
4.5	.466570	1	-.824824	1	-.146612	1	-.168887	1	.100863	2	.996729
5.0	.458375	1	-.916540	1	-.165324	1	-.186808	1	.109845	2	.997348
5.5	.451316	1	-.100705	2	-.184311	1	-.205017	1	.118711	2	.997807
6.0	.445124	1	-.109640	2	-.203574	1	-.223516	1	.127467	2	.998156
6.5	.439615	1	-.118463	2	-.223114	1	-.242304	1	.136117	2	.998428
7.0	.434654	1	-.127179	2	-.242931	1	-.261380	1	.144664	2	.998644
7.5	.430146	1	-.135790	2	-.263023	1	-.280744	1	.153112	2	.998819
8.0	.426016	1	-.144300	2	-.283391	1	-.300393	1	.161463	2	.998961
8.5	.422208	1	-.152711	2	-.304032	1	-.320326	1	.169720	2	.999080
9.0	.418675	1	-.161027	2	-.324945	1	-.340540	1	.177886	2	.999179
9.5	.415382	1	-.169249	2	-.346128	1	-.361033	1	.185961	2	.999263
10.0	.412299	1	-.177379	2	-.367579	1	-.381803	1	.193948	2	.999335

ELECTRON Z = 51, A = 125

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.124732	2	-.705092		-.114546		-.350322		.230599	1	.802168
1.0	.767418	1	-.157068	1	-.257703		-.527395		.343510	1	.937196
1.5	.637013	1	-.254411	1	-.422815		-.697097		.447864	1	.970571
2.0	.578762	1	-.354060	1	-.596813		-.866915		.548631	1	.983123
2.5	.545249	1	-.453366	1	-.775540		-.103849	1	.646996	1	.989100
3.0	.522878	1	-.551526	1	-.957664		-.121242	1	.743447	1	.992392
3.5	.506474	1	-.648314	1	-.114274	1	-.138897	1	.838247	1	.994394
4.0	.493667	1	-.743692	1	-.133062	1	-.156829	1	.931556	1	.995699
4.5	.483225	1	-.837689	1	-.152127	1	-.175046	1	.102349	2	.996597
5.0	.474438	1	-.930353	1	-.171468	1	-.193552	1	.111413	2	.997241
5.5	.466867	1	-.102174	2	-.191086	1	-.212348	1	.120355	2	.997718
6.0	.460224	1	-.111189	2	-.210981	1	-.231437	1	.129181	2	.998082
6.5	.454313	1	-.120087	2	-.231154	1	-.250817	1	.137894	2	.998365
7.0	.448991	1	-.128870	2	-.251605	1	-.270488	1	.146499	2	.998590
7.5	.444154	1	-.137543	2	-.272332	1	-.290449	1	.154999	2	.998771
8.0	.439723	1	-.146109	2	-.293337	1	-.310698	1	.163397	2	.998920
8.5	.435637	1	-.154571	2	-.314615	1	-.331233	1	.171696	2	.999043
9.0	.431848	1	-.162932	2	-.336167	1	-.352052	1	.179898	2	.999146
9.5	.428316	1	-.171194	2	-.357991	1	-.373151	1	.188005	2	.999233
10.0	.425009	1	-.179359	2	-.380083	1	-.394528	1	.196020	2	.999308

ELECTRON   Z = 52, A = 125

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.131402	2	-.728382		-.120565		-.366044		.236185	1	.796565
1.0	.805676	1	-.161210	1	-.269452		-.550036		.351242	1	.934946
1.5	.666946	1	-.260398	1	-.440775		-.725878		.457334	1	.969458
2.0	.604785	1	-.361815	1	-.621030		-.901604		.559694	1	.982472
2.5	.568935	1	-.462791	1	-.805939		-.107895	1	.659554	1	.988675
3.0	.544957	1	-.562525	1	-.994143		-.125856	1	.757418	1	.992095
3.5	.527349	1	-.660797	1	-.118520	1	-.144071	1	.853555	1	.994174
4.0	.513589	1	-.757580	1	-.137896	1	-.162554	1	.948136	1	.995530
4.5	.502362	1	-.852907	1	-.157540	1	-.181316	1	.104128	2	.996463
5.0	.492909	1	-.946835	1	-.177452	1	-.200360	1	.113307	2	.997132
5.5	.484763	1	-.103942	2	-.197633	1	-.219690	1	.122359	2	.997628
6.0	.477614	1	-.113072	2	-.218084	1	-.239306	1	.131289	2	.998006
6.5	.471252	1	-.122078	2	-.238807	1	-.259208	1	.140102	2	.998300
7.0	.465524	1	-.130966	2	-.259801	1	-.279396	1	.148802	2	.998534
7.5	.460318	1	-.139738	2	-.281067	1	-.299870	1	.157393	2	.998722
8.0	.455550	1	-.148398	2	-.302603	1	-.320626	1	.165878	2	.998877
8.5	.451154	1	-.156951	2	-.324408	1	-.341663	1	.174260	2	.999005
9.0	.447076	1	-.165398	2	-.346481	1	-.362980	1	.182542	2	.999112
9.5	.443277	1	-.173742	2	-.368819	1	-.384573	1	.190724	2	.999203
10.0	.439720	1	-.181985	2	-.391422	1	-.406440	1	.198811	2	.999281

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.138356	2	-.752236		-.126872		-.382206		.241817	1	.790972
1.0	.845480	1	-.165422	1	-.281698		-.573311		.359031	1	.932670
1.5	.697999	1	-.266457	1	-.459456		-.755458		.466851	1	.968328
2.0	.631715	1	-.369633	1	-.646201		-.937260		.570782	1	.981810
2.5	.593392	1	-.472260	1	-.837531		-.112056	1	.672106	1	.988243
3.0	.567712	1	-.573541	1	-.103206	1	-.130603	1	.771344	1	.991791
3.5	.548829	1	-.673265	1	-.122934	1	-.149397	1	.868776	1	.993950
4.0	.534059	1	-.771412	1	-.142925	1	-.168454	1	.964578	1	.995358
4.5	.521999	1	-.868024	1	-.163175	1	-.187782	1	.105887	2	.996327
5.0	.511842	1	-.963163	1	-.183686	1	-.207389	1	.115176	2	.997021
5.5	.503085	1	-.105689	2	-.204460	1	-.227275	1	.124331	2	.997537
6.0	.495401	1	-.114927	2	-.225498	1	-.247444	1	.133358	2	.997929
6.5	.488561	1	-.124036	2	-.246802	1	-.267895	1	.142264	2	.998234
7.0	.482403	1	-.133020	2	-.268371	1	-.288628	1	.151051	2	.998477
7.5	.476807	1	-.141883	2	-.290207	1	-.309642	1	.159725	2	.998673
8.0	.471682	1	-.150630	2	-.312308	1	-.330935	1	.168288	2	.998833
8.5	.466956	1	-.159264	2	-.334674	1	-.352506	1	.176743	2	.998966
9.0	.462575	1	-.167787	2	-.357303	1	-.374352	1	.185094	2	.999078
9.5	.458492	1	-.176204	2	-.380194	1	-.396471	1	.193342	2	.999172
10.0	.454671	1	-.184516	2	-.403344	1	-.418861	1	.201490	2	.999253

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.145534	2	-.776469		-.133466		-.398712		.247430	1	.785392
1.0	.886460	1	-.169662	1	-.294437		-.597086		.366776	1	.930367
1.5	.729860	1	-.272515	1	-.478855		-.785679		.476279	1	.967180
2.0	.659261	1	-.377408	1	-.672330		-.973712		.581723	1	.981136
2.5	.618345	1	-.481634	1	-.870337		-.116314	1	.684443	1	.987803
3.0	.590878	1	-.584400	1	-.107146	1	-.135467	1	.784979	1	.991483
3.5	.570654	1	-.685503	1	-.127527	1	-.154861	1	.883621	1	.993721
4.0	.554821	1	-.784934	1	-.148162	1	-.174514	1	.980551	1	.995182
4.5	.541885	1	-.882743	1	-.169051	1	-.194435	1	.107590	2	.996188
5.0	.530986	1	-.978998	1	-.190195	1	-.214630	1	.116977	2	.996909
5.5	.521588	1	-.107377	2	-.211597	1	-.235103	1	.126224	2	.997443
6.0	.513339	1	-.116712	2	-.233258	1	-.255855	1	.135337	2	.997850
6.5	.505997	1	-.125911	2	-.255181	1	-.276887	1	.144322	2	.998167
7.0	.499388	1	-.134979	2	-.277366	1	-.298199	1	.153183	2	.998419
7.5	.493382	1	-.143921	2	-.299813	1	-.319789	1	.161926	2	.998622
8.0	.487881	1	-.152740	2	-.322522	1	-.341657	1	.170552	2	.998789
8.5	.482811	1	-.161441	2	-.345493	1	-.363799	1	.179066	2	.998927
9.0	.478110	1	-.170027	2	-.368723	1	-.386215	1	.187471	2	.999043
9.5	.473731	1	-.178501	2	-.392212	1	-.408901	1	.195768	2	.999141
10.0	.469633	1	-.186865	2	-.415957	1	-.431856	1	.203960	2	.999224

ELECTRON   Z = 55, A = 133

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.153375	2	-.802296		-.140406		-.416184		.253423	1	.779827
1.0	.931272	1	-.174197	1	-.307750		-.622202		.375084	1	.928038
1.5	.764703	1	-.279016	1	-.499021		-.817500		.486427	1	.966015
2.0	.689379	1	-.385776	1	-.699367		-.101195	1	.593536	1	.980451
2.5	.645621	1	-.491749	1	-.904137		-.120764	1	.697803	1	.987356
3.0	.616195	1	-.596149	1	-.111189	1	-.140530	1	.799788	1	.991169
3.5	.594500	1	-.698784	1	-.132220	1	-.160527	1	.899793	1	.993489
4.0	.577502	1	-.799652	1	-.153494	1	-.180774	1	.998008	1	.995003
4.5	.563606	1	-.898813	1	-.175011	1	-.201281	1	.109457	2	.996046
5.0	.551894	1	-.996343	1	-.196773	1	-.222056	1	.118959	2	.996794
5.5	.541794	1	-.109232	2	-.218783	1	-.243101	1	.128314	2	.997348
6.0	.532928	1	-.118680	2	-.241045	1	-.264418	1	.137529	2	.997770
6.5	.525036	1	-.127987	2	-.263560	1	-.286010	1	.146611	2	.998099
7.0	.517932	1	-.137156	2	-.286331	1	-.307875	1	.155565	2	.998360
7.5	.511478	1	-.146194	2	-.309356	1	-.330013	1	.164394	2	.998571
8.0	.505567	1	-.155105	2	-.332637	1	-.352422	1	.173103	2	.998744
8.5	.500120	1	-.163892	2	-.356173	1	-.375102	1	.181695	2	.998887
9.0	.495070	1	-.172559	2	-.379962	1	-.398049	1	.190173	2	.999007
9.5	.490367	1	-.181110	2	-.404003	1	-.421262	1	.198539	2	.999109
10.0	.485967	1	-.189547	2	-.428295	1	-.444738	1	.206797	2	.999195

ELECTRON Z = 56, A = 138

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.161411	2	-.828356		-.147649		-.433929		.259336	1	.774280
1.0	.977047	1	-.178723	1	-.321575		-.647722		.383255	1	.925685
1.5	.800154	1	-.285451	1	-.519932		-.849849		.496361	1	.964833
2.0	.719917	1	-.394006	1	-.727403		-.105086	1	.605043	1	.979756
2.5	.673196	1	-.501641	1	-.939211		-.125298	1	.710752	1	.986901
3.0	.641722	1	-.607578	1	-.115390	1	-.145697	1	.814072	1	.990849
3.5	.618492	1	-.711635	1	-.137103	1	-.166320	1	.915315	1	.993252
4.0	.600274	1	-.813821	1	-.159050	1	-.187187	1	.101468	2	.994822
4.5	.585375	1	-.914205	1	-.181231	1	-.208309	1	.111231	2	.995902
5.0	.572813	1	-.101287	2	-.203650	1	-.229693	1	.120832	2	.996676
5.5	.561978	1	-.110990	2	-.226311	1	-.251343	1	.130280	2	.997251
6.0	.552467	1	-.120537	2	-.249217	1	-.273261	1	.139581	2	.997688
6.5	.544002	1	-.129934	2	-.272370	1	-.295450	1	.148743	2	.998029
7.0	.536381	1	-.139188	2	-.295773	1	-.317908	1	.157770	2	.998300
7.5	.529459	1	-.148304	2	-.319427	1	-.340636	1	.166667	2	.998519
8.0	.523121	1	-.157287	2	-.343330	1	-.363632	1	.175438	2	.998698
8.5	.517280	1	-.166140	2	-.367484	1	-.386895	1	.184087	2	.998846
9.0	.511867	1	-.174868	2	-.391886	1	-.410422	1	.192617	2	.998971
9.5	.506826	1	-.183475	2	-.416537	1	-.434211	1	.201031	2	.999076
10.0	.502110	1	-.191962	2	-.441433	1	-.458259	1	.209331	2	.999166

ELECTRON Z = 57, A = 139

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.170201	2	-.856157		-.155282		-.452733		.265659	1	.768753
1.0	.102717	2	-.183570	1	-.336053		-.674715		.392028	1	.923307
1.5	.838973	1	-.292364	1	-.541720		-.883961		.507065	1	.963634
2.0	.753349	1	-.402870	1	-.756486		-.109175	1	.617479	1	.979049
2.5	.703376	1	-.512326	1	-.975449		-.130045	1	.724790	1	.986439
3.0	.669656	1	-.619957	1	-.119713	1	-.151088	1	.829604	1	.990524
3.5	.644738	1	-.725594	1	-.142110	1	-.172343	1	.932245	1	.993012
4.0	.625184	1	-.829259	1	-.164726	1	-.193831	1	.103292	2	.994636
4.5	.609183	1	-.931030	1	-.187564	1	-.215563	1	.113179	2	.995755
5.0	.595689	1	-.103100	2	-.210628	1	-.237549	1	.122897	2	.996557
5.5	.584049	1	-.112925	2	-.233923	1	-.259792	1	.132454	2	.997152
6.0	.573831	1	-.122587	2	-.257453	1	-.282297	1	.141859	2	.997605
6.5	.564736	1	-.132093	2	-.281221	1	-.305064	1	.151118	2	.997959
7.0	.556551	1	-.141450	2	-.305230	1	-.328094	1	.160237	2	.998239
7.5	.549116	1	-.150662	2	-.329481	1	-.351386	1	.169221	2	.998466
8.0	.542310	1	-.159736	2	-.353974	1	-.374940	1	.178074	2	.998651
8.5	.536039	1	-.168675	2	-.378709	1	-.398754	1	.186800	2	.998805
9.0	.530229	1	-.177484	2	-.403686	1	-.422826	1	.195402	2	.998934
9.5	.524818	1	-.186166	2	-.428904	1	-.447154	1	.203884	2	.999043
10.0	.519759	1	-.194725	2	-.454360	1	-.471735	1	.212248	2	.999136

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.179528	2	-.885033		-.163294		-.472259		.272162	1	.763248
1.0	.108028	2	-.188586	1	-.351162		-.702725		.401056	1	.920906
1.5	.880027	1	-.299501	1	-.564386		-.919313		.518073	1	.962419
2.0	.788640	1	-.412006	1	-.786676		-.113408	1	.630258	1	.978331
2.5	.735183	1	-.523321	1	-.101300	1	-.134954	1	.739200	1	.985969
3.0	.699053	1	-.632680	1	-.124187	1	-.156657	1	.845532	1	.990193
3.5	.672327	1	-.739927	1	-.147285	1	-.178558	1	.949593	1	.992767
4.0	.651337	1	-.845094	1	-.170588	1	-.200680	1	.105160	2	.994448
4.5	.634156	1	-.948271	1	-.194098	1	-.223037	1	.115172	2	.995606
5.0	.619663	1	-.104956	2	-.217821	1	-.245637	1	.125007	2	.996436
5.5	.607159	1	-.114905	2	-.241763	1	-.268486	1	.134675	2	.997052
6.0	.596184	1	-.124684	2	-.265930	1	-.291587	1	.144184	2	.997521
6.5	.586416	1	-.134299	2	-.290325	1	-.314942	1	.153541	2	.997887
7.0	.577625	1	-.143758	2	-.314950	1	-.338553	1	.162752	2	.998177
7.5	.569642	1	-.153068	2	-.339809	1	-.362418	1	.171823	2	.998411
8.0	.562335	1	-.162233	2	-.364901	1	-.386539	1	.180758	2	.998603
8.5	.555604	1	-.171258	2	-.390227	1	-.410912	1	.189560	2	.998763
9.0	.549369	1	-.180147	2	-.415787	1	-.435536	1	.198235	2	.998896
9.5	.543564	1	-.188905	2	-.441579	1	-.460410	1	.206785	2	.999009
10.0	.538137	1	-.197536	2	-.467603	1	-.485531	1	.215212	2	.999105

ELECTRON Z = 59, A = 144

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.189168	2	-.914367		-.171655		-.492179		.278640	1	.757767
1.0	.113504	2	-.193635	1	-.366846		-.731300		.410028	1	.918483
1.5	.922202	1	-.306636	1	-.587862		-.955371		.528971	1	.961187
2.0	.824780	1	-.421090	1	-.817918		-.117725	1	.642857	1	.977603
2.5	.767667	1	-.534201	1	-.105186	1	-.139963	1	.753351	1	.985492
3.0	.729006	1	-.645213	1	-.128817	1	-.162344	1	.861111	1	.989857
3.5	.700377	1	-.753984	1	-.152644	1	-.184910	1	.966493	1	.992518
4.0	.677879	1	-.860560	1	-.176661	1	-.207688	1	.106973	2	.994257
4.5	.659456	1	-.965040	1	-.200872	1	-.230690	1	.117098	2	.995454
5.0	.643912	1	-.106753	2	-.225285	1	-.253928	1	.127038	2	.996313
5.5	.630502	1	-.116815	2	-.249907	1	-.277407	1	.136804	2	.996950
6.0	.618730	1	-.126697	2	-.274743	1	-.301131	1	.146403	2	.997435
6.5	.608255	1	-.136409	2	-.299798	1	-.325103	1	.155844	2	.997813
7.0	.598830	1	-.145957	2	-.325076	1	-.349323	1	.165132	2	.998114
7.5	.590272	1	-.155349	2	-.350579	1	-.373792	1	.174274	2	.998356
8.0	.582440	1	-.164589	2	-.376307	1	-.398510	1	.183274	2	.998555
8.5	.575223	1	-.173684	2	-.402262	1	-.423475	1	.192137	2	.998720
9.0	.568547	1	-.182638	2	-.428444	1	-.448685	1	.200866	2	.998858
9.5	.562330	1	-.191455	2	-.454851	1	-.474140	1	.209466	2	.998975
10.0	.556518	1	-.200138	2	-.481483	1	-.499835	1	.217938	2	.999074

ELECTRON Z = 60, A = 144

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.199751	2	-.945730		-.180494		-.513342		.285587	1	.752311
1.0	.119518	2	-.199054	1	-.383330		-.761608		.419686	1	.916038
1.5	.968527	1	-.314318	1	-.612422		-.993513		.540743	1	.959939
2.0	.864467	1	-.430897	1	-.850471		-.122279	1	.656509	1	.976864
2.5	.803329	1	-.545980	1	-.109219	1	-.145229	1	.768730	1	.985007
3.0	.761882	1	-.658821	1	-.133606	1	-.168302	1	.878094	1	.989516
3.5	.731159	1	-.769292	1	-.158168	1	-.191544	1	.984974	1	.992265
4.0	.707001	1	-.877455	1	-.182901	1	-.214982	1	.108961	2	.994062
4.5	.687211	1	-.983419	1	-.207811	1	-.238632	1	.119218	2	.995300
5.0	.670513	1	-.108730	2	-.232906	1	-.262505	1	.129282	2	.996188
5.5	.656106	1	-.118922	2	-.258196	1	-.286608	1	.139164	2	.996846
6.0	.643460	1	-.128927	2	-.283687	1	-.310944	1	.148873	2	.997348
6.5	.632209	1	-.138754	2	-.309385	1	-.335519	1	.158417	2	.997739
7.0	.622087	1	-.148411	2	-.335293	1	-.360332	1	.167803	2	.998049
7.5	.612897	1	-.157905	2	-.361415	1	-.385385	1	.177037	2	.998300
8.0	.604490	1	-.167242	2	-.387752	1	-.410677	1	.186124	2	.998506
8.5	.596749	1	-.176428	2	-.414305	1	-.436207	1	.195068	2	.998676
9.0	.589581	1	-.185467	2	-.441075	1	-.461975	1	.203874	2	.998819
9.5	.582911	1	-.194364	2	-.468061	1	-.487978	1	.212545	2	.998940
10.0	.576679	1	-.203123	2	-.495263	1	-.514215	1	.221085	2	.999043

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.210702	2	-.977600		-.189715		-.534930		.292509	1	.746883
1.0	.125725	2	-.204509	1	-.400433		-.792520		.429287	1	.913571
1.5	.101617	2	-.322000	1	-.637845		-.103240	1	.552401	1	.958675
2.0	.905151	1	-.440652	1	-.884133		-.126921	1	.669973	1	.976114
2.5	.839787	1	-.557639	1	-.113389	1	-.150599	1	.783837	1	.984514
3.0	.795409	1	-.672230	1	-.138558	1	-.174382	1	.894710	1	.989170
3.5	.762484	1	-.784313	1	-.163881	1	-.198318	1	.100298	2	.992009
4.0	.736580	1	-.893961	1	-.189357	1	-.222436	1	.110891	2	.993864
4.5	.715354	1	-.100130	2	-.214994	1	-.246755	1	.121267	2	.995143
5.0	.697441	1	-.110646	2	-.240802	1	-.271285	1	.131442	2	.996060
5.5	.681986	1	-.120955	2	-.266790	1	-.296034	1	.141427	2	.996741
6.0	.668422	1	-.131070	2	-.292968	1	-.321009	1	.151232	2	.997259
6.5	.656356	1	-.140998	2	-.319340	1	-.346212	1	.160864	2	.997663
7.0	.645503	1	-.150749	2	-.345912	1	-.371645	1	.170332	2	.997984
7.5	.635652	1	-.160330	2	-.372688	1	-.397310	1	.179641	2	.998243
8.0	.626642	1	-.169748	2	-.399669	1	-.423206	1	.188797	2	.998455
8.5	.618347	1	-.179008	2	-.426857	1	-.449332	1	.197805	2	.998631
9.0	.610668	1	-.188115	2	-.454252	1	-.475689	1	.206670	2	.998779
9.5	.603525	1	-.197075	2	-.481855	1	-.502274	1	.215394	2	.998904
10.0	.596852	1	-.205891	2	-.509664	1	-.529084	1	.223983	2	.999011

ELECTRON Z = 62, A = 150

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.222324	2	-.101069	1	-.199387		-.557334		.299625	1	.741484
1.0	.132303	2	-.210153	1	-.418277		-.824574		.439159	1	.911084
1.5	.106655	2	-.329927	1	-.664278		-.107268	1	.564377	1	.957395
2.0	.948093	1	-.450697	1	-.919053		-.131722	1	.683792	1	.975353
2.5	.878201	1	-.569627	1	-.117707	1	-.156146	1	.799323	1	.984015
3.0	.830683	1	-.685996	1	-.143677	1	-.180654	1	.911725	1	.988818
3.5	.795397	1	-.799713	1	-.169780	1	-.205299	1	.102141	2	.991748
4.0	.767621	1	-.910867	1	-.196015	1	-.230112	1	.112863	2	.993663
4.5	.744855	1	-.101959	2	-.222394	1	-.255111	1	.123360	2	.994983
5.0	.725641	1	-.112604	2	-.248928	1	-.280309	1	.133646	2	.995931
5.5	.709065	1	-.123032	2	-.275628	1	-.305716	1	.143734	2	.996633
6.0	.694519	1	-.133256	2	-.302503	1	-.331338	1	.153634	2	.997169
6.5	.681581	1	-.143286	2	-.329561	1	-.357178	1	.163355	2	.997586
7.0	.669946	1	-.153131	2	-.356807	1	-.383239	1	.172904	2	.997918
7.5	.659388	1	-.162799	2	-.384244	1	-.409523	1	.182288	2	.998185
8.0	.649733	1	-.172296	2	-.411877	1	-.436029	1	.191513	2	.998405
8.5	.640848	1	-.181629	2	-.439706	1	-.462758	1	.200583	2	.998586
9.0	.632624	1	-.190804	2	-.467733	1	-.489708	1	.209505	2	.998739
9.5	.624977	1	-.199825	2	-.495958	1	-.516878	1	.218282	2	.998868
10.0	.617833	1	-.208698	2	-.524380	1	-.544267	1	.226918	2	.998978

ELECTRON Z = 63, A = 153

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.234663	2	-.104506	1	-.209535		-.580586		.306943	1	.736115
1.0	.139277	2	-.215993	1	-.436894		-.857815		.449309	1	.908577
1.5	.111986	2	-.338108	1	-.691768		-.111439	1	.576683	1	.956099
2.0	.993435	1	-.461043	1	-.955282		-.136687	1	.697974	1	.974582
2.5	.918691	1	-.581951	1	-.122178	1	-.161876	1	.815200	1	.983508
3.0	.867806	1	-.700130	1	-.148970	1	-.187126	1	.929151	1	.988460
3.5	.829988	1	-.815505	1	-.175871	1	-.212495	1	.104025	2	.991483
4.0	.800205	1	-.928182	1	-.202883	1	-.238015	1	.114879	2	.993459
4.5	.775789	1	-.103831	2	-.230019	1	-.263707	1	.125497	2	.994822
5.0	.755182	1	-.114604	2	-.257293	1	-.289586	1	.135895	2	.995799
5.5	.737405	1	-.125152	2	-.284717	1	-.315660	1	.146086	2	.996525
6.0	.721807	1	-.135486	2	-.312301	1	-.341938	1	.156081	2	.997077
6.5	.707937	1	-.145618	2	-.340055	1	-.368424	1	.165889	2	.997508
7.0	.695466	1	-.155556	2	-.367983	1	-.395121	1	.175519	2	.997850
7.5	.684152	1	-.165310	2	-.396091	1	-.422030	1	.184977	2	.998126
8.0	.673810	1	-.174887	2	-.424383	1	-.449153	1	.194269	2	.998353
8.5	.664294	1	-.184293	2	-.452861	1	-.476489	1	.203402	2	.998540
9.0	.655489	1	-.193534	2	-.481525	1	-.504037	1	.212380	2	.998698
9.5	.647303	1	-.202615	2	-.510377	1	-.531798	1	.221207	2	.998831
10.0	.639659	1	-.211543	2	-.539417	1	-.559768	1	.229889	2	.998945

ELECTRON Z = 64, A = 156

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.247770	2	-.108076	1	-.220183		-.604721		.314468	1	.730778
1.0	.146674	2	-.222037	1	-.456324		-.892291		.459748	1	.906051
1.5	.117628	2	-.346551	1	-.720359		-.115759	1	.589327	1	.954788
2.0	.104133	2	-.471699	1	-.992873		-.141823	1	.712531	1	.973800
2.5	.961385	1	-.594625	1	-.126808	1	-.167795	1	.831478	1	.982993
3.0	.906888	1	-.714643	1	-.154444	1	-.193804	1	.946997	1	.988097
3.5	.866354	1	-.831698	1	-.182162	1	-.219912	1	.105954	2	.991214
4.0	.834419	1	-.945916	1	-.209967	1	-.246153	1	.116940	2	.993252
4.5	.808235	1	-.105746	2	-.237876	1	-.272551	1	.127679	2	.994657
5.0	.786135	1	-.116649	2	-.265904	1	-.299121	1	.138189	2	.995666
5.5	.767072	1	-.127317	2	-.294064	1	-.325874	1	.148483	2	.996414
6.0	.750349	1	-.137761	2	-.322369	1	-.352817	1	.158573	2	.996984
6.5	.735481	1	-.147994	2	-.350828	1	-.379957	1	.168468	2	.997429
7.0	.722116	1	-.158026	2	-.379449	1	-.407297	1	.178178	2	.997782
7.5	.709995	1	-.167866	2	-.408236	1	-.434839	1	.187709	2	.998067
8.0	.698918	1	-.177521	2	-.437194	1	-.462583	1	.197068	2	.998300
8.5	.688729	1	-.186998	2	-.466326	1	-.490532	1	.206261	2	.998494
9.0	.679304	1	-.196305	2	-.495634	1	-.518683	1	.215294	2	.998656
9.5	.670544	1	-.205446	2	-.525119	1	-.547037	1	.224171	2	.998794
10.0	.662366	1	-.214426	2	-.554780	1	-.575592	1	.232897	2	.998911

ELECTRON   Z = 65, A = 159

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.261700	2	-.111785	1	-.231356		-.629775		.322210	1	.725475
1.0	.154524	2	-.228293	1	-.476603		-.928049		.470486	1	.903507
1.5	.123602	2	-.355267	1	-.750101		-.120233	1	.602321	1	.953462
2.0	.109194	2	-.482677	1	-.103188	1	-.147136	1	.727473	1	.973008
2.5	.100642	2	-.607658	1	-.131605	1	-.173910	1	.848167	1	.982472
3.0	.948046	1	-.729545	1	-.160105	1	-.200696	1	.965273	1	.987729
3.5	.904599	1	-.848304	1	-.138659	1	-.227557	1	.107927	2	.990941
4.0	.870356	1	-.964080	1	-.217275	1	-.254533	1	.119045	2	.993042
4.5	.842276	1	-.107705	2	-.245972	1	-.281649	1	.129907	2	.994490
5.0	.818576	1	-.118740	2	-.274767	1	-.308922	1	.140529	2	.995530
5.5	.798135	1	-.129527	2	-.303677	1	-.336363	1	.150926	2	.996302
6.0	.780208	1	-.140082	2	-.332714	1	-.363982	1	.161110	2	.996890
6.5	.764272	1	-.150416	2	-.361889	1	-.391784	1	.171092	2	.997348
7.0	.749953	1	-.160541	2	-.391211	1	-.419774	1	.180881	2	.997712
7.5	.736969	1	-.170466	2	-.420685	1	-.447954	1	.190484	2	.998006
8.0	.725107	1	-.180198	2	-.450317	1	-.476327	1	.199909	2	.998247
8.5	.714199	1	-.189747	2	-.480110	1	-.504893	1	.209162	2	.998447
9.0	.704113	1	-.199117	2	-.510067	1	-.533652	1	.218248	2	.998614
9.5	.694740	1	-.208316	2	-.540189	1	-.562603	1	.227173	2	.998756
10.0	.685994	1	-.217349	2	-.570476	1	-.591745	1	.235941	2	.998877

ELECTRON $Z = 66$, $A = 161$

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.276651	2	-.115670	1	-.243118		-.655965		.330269	1	.720205
1.0	.162940	2	-.234834	1	-.497840		-.965392		.481670	1	.900945
1.5	.129996	2	-.364369	1	-.781140		-.124899	1	.615859	1	.952121
2.0	.114602	2	-.494131	1	-.107249	1	-.152666	1	.743039	1	.972206
2.5	.105447	2	-.621250	1	-.136587	1	-.180266	1	.865552	1	.981943
3.0	.991912	1	-.745081	1	-.165973	1	-.207846	1	.984312	1	.987356
3.5	.945314	1	-.865614	1	-.195382	1	-.235479	1	.109982	2	.990664
4.0	.908577	1	-.983012	1	-.224825	1	-.263205	1	.121239	2	.992829
4.5	.878448	1	-.109747	2	-.254324	1	-.291051	1	.132229	2	.994321
5.0	.853021	1	-.120918	2	-.283898	1	-.319037	1	.142968	2	.995392
5.5	.831094	1	-.131832	2	-.313566	1	-.347175	1	.153473	2	.996188
6.0	.811867	1	-.142503	2	-.343343	1	-.375475	1	.163757	2	.996794
6.5	.794781	1	-.152944	2	-.373240	1	-.403945	1	.173831	2	.997266
7.0	.779433	1	-.163167	2	-.403267	1	-.432589	1	.183704	2	.997641
7.5	.765520	1	-.173181	2	-.433431	1	-.461411	1	.193384	2	.997944
8.0	.752813	1	-.182997	2	-.463738	1	-.490413	1	.202880	2	.998193
8.5	.741132	1	-.192621	2	-.494192	1	-.519596	1	.212197	2	.998398
9.0	.730334	1	-.202061	2	-.524796	1	-.548961	1	.221341	2	.998571
9.5	.720304	1	-.211323	2	-.555552	1	-.578506	1	.230319	2	.998717
10.0	.710946	1	-.220412	2	-.586461	1	-.608233	1	.239134	2	.998842

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ELECTRON   Z = 67, A = 165

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.292264	2	-.119645	1	-.255390		-.682795		.338371	1	.714971
1.0	.171707	2	-.241475	1	-.519876		-.100362	1	.492894	1	.898367
1.5	.136636	2	-.373558	1	-.813243		-.129671	1	.629401	1	.950766
2.0	.120201	2	-.505639	1	-.111440	1	-.158317	1	.758559	1	.971393
2.5	.110409	2	-.634848	1	-.141722	1	-.186755	1	.882826	1	.981407
3.0	.103710	2	-.760564	1	-.172016	1	-.215145	1	.100316	2	.986978
3.5	.987171	1	-.882800	1	-.202301	1	-.243562	1	.112010	2	.990383
4.0	.947796	1	-.100174	2	-.232591	1	-.272050	1	.123397	2	.992612
4.5	.915501	1	-.111760	2	-.262912	1	-.300640	1	.134504	2	.994149
5.0	.888249	1	-.123059	2	-.293285	1	-.329351	1	.145350	2	.995253
5.5	.864754	1	-.134088	2	-.323730	1	-.358199	1	.155953	2	.996072
6.0	.844156	1	-.144864	2	-.354265	1	-.387195	1	.166325	2	.996696
6.5	.825858	1	-.155400	2	-.384903	1	-.416346	1	.176478	2	.997183
7.0	.809425	1	-.165709	2	-.415654	1	-.445658	1	.186422	2	.997569
7.5	.794534	1	-.175801	2	-.446526	1	-.475135	1	.196166	2	.997882
8.0	.780938	1	-.185686	2	-.477527	1	-.504780	1	.205719	2	.998138
8.5	.768444	1	-.195373	2	-.508660	1	-.534594	1	.215086	2	.998350
9.0	.756899	1	-.204868	2	-.539930	1	-.564579	1	.224274	2	.998528
9.5	.746177	1	-.214178	2	-.571338	1	-.594733	1	.233290	2	.998678
10.0	.736178	1	-.223311	2	-.602887	1	-.625058	1	.242137	2	.998807

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.309357	2	-.123878	1	-.268397		-.711243		.347010	1	.709773
1.0	.181301	2	-.248561	1	-.543120		-.104411	1	.504886	1	.895772
1.5	.143897	2	-.383378	1	-.846986		-.134715	1	.643905	1	.949395
2.0	.126320	2	-.517961	1	-.115833	1	-.164278	1	.775214	1	.970571
2.5	.115827	2	-.649435	1	-.147089	1	-.193586	1	.901403	1	.980864
3.0	.108641	2	-.777205	1	-.178316	1	-.222810	1	.102348	2	.986594
3.5	.103283	2	-.901311	1	-.209497	1	-.252032	1	.114201	2	.990098
4.0	.990555	1	-.102196	2	-.240650	1	-.281301	1	.125734	2	.992392
4.5	.955886	1	-.113939	2	-.271804	1	-.310647	1	.136975	2	.993975
5.0	.926633	1	-.125381	2	-.302983	1	-.340095	1	.147945	2	.995111
5.5	.901418	1	-.136542	2	-.334211	1	-.369660	1	.158661	2	.995954
6.0	.879319	1	-.147440	2	-.365506	1	-.399355	1	.169137	2	.996597
6.5	.859693	1	-.158088	2	-.396883	1	-.429188	1	.179387	2	.997098
7.0	.842073	1	-.168500	2	-.428354	1	-.459166	1	.189420	2	.997497
7.5	.826113	1	-.178687	2	-.459928	1	-.489295	1	.199245	2	.997818
8.0	.811546	1	-.188660	2	-.491613	1	-.519577	1	.208872	2	.998082
8.5	.798164	1	-.198426	2	-.523415	1	-.550014	1	.218307	2	.998300
9.0	.785801	1	-.207994	2	-.555337	1	-.580609	1	.227558	2	.998483
9.5	.774325	1	-.217372	2	-.587383	1	-.611360	1	.236630	2	.998639
10.0	.763626	1	-.226565	2	-.619556	1	-.642269	1	.245528	2	.998771

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.326886	2	-.128138	1	-.281876		-.739971		.355493	1	.704612
1.0	.191106	2	-.255613	1	-.567063		-.108497	1	.516616	1	.893161
1.5	.151287	2	-.393065	1	-.881630		-.139801	1	.658014	1	.948011
2.0	.132522	2	-.530024	1	-.120334	1	-.170286	1	.791325	1	.969738
2.5	.121300	2	-.663619	1	-.152584	1	-.200469	1	.919269	1	.980313
3.0	.113607	2	-.793283	1	-.184763	1	-.230534	1	.104291	2	.986205
3.5	.107867	2	-.919085	1	-.216859	1	-.260569	1	.116283	2	.989809
4.0	.103339	2	-.104126	2	-.248895	1	-.290626	1	.127942	2	.992170
4.5	.996243	1	-.116005	2	-.280902	1	-.320740	1	.139296	2	.993798
5.0	.964908	1	-.127570	2	-.312909	1	-.350935	1	.150367	2	.994967
5.5	.937906	1	-.138842	2	-.344941	1	-.381229	1	.161173	2	.995835
6.0	.914247	1	-.149838	2	-.377018	1	-.411637	1	.171730	2	.996497
6.5	.893243	1	-.160574	2	-.409157	1	-.442167	1	.182050	2	.997013
7.0	.874393	1	-.171065	2	-.441372	1	-.472828	1	.192146	2	.997423
7.5	.857325	1	-.181321	2	-.473673	1	-.503624	1	.202026	2	.997754
8.0	.841751	1	-.191354	2	-.506068	1	-.534561	1	.211700	2	.998025
8.5	.827450	1	-.201173	2	-.538563	1	-.565640	1	.221175	2	.998250
9.0	.814243	1	-.210787	2	-.571164	1	-.596864	1	.230459	2	.998439
9.5	.801987	1	-.220203	2	-.603875	1	-.628232	1	.239558	2	.998598
10.0	.790565	1	-.229428	2	-.636698	1	-.659746	1	.248478	2	.998735

ELECTRON Z = 70, A = 171

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.346471	2	-.132754	1	-.296275		-.770900		.364764	1	.699489
1.0	.202066	2	-.263297	1	-.592538		-.112890	1	.529486	1	.890535
1.5	.159548	2	-.403670	1	-.918363		-.145259	1	.673563	1	.946613
2.0	.139456	2	-.543288	1	-.125092	1	-.176717	1	.809156	1	.968895
2.5	.127420	2	-.679283	1	-.158374	1	-.207818	1	.939131	1	.979756
3.0	.119160	2	-.811117	1	-.191537	1	-.238760	1	.106461	2	.985811
3.5	.112995	2	-.938891	1	-.224572	1	-.269637	1	.118621	2	.989516
4.0	.108129	2	-.106286	2	-.257509	1	-.300505	1	.130433	2	.991944
4.5	.104139	2	-.118330	2	-.290383	1	-.331404	1	.141927	2	.993618
5.0	.100774	2	-.130046	2	-.323226	1	-.362361	1	.153127	2	.994822
5.5	.978747	1	-.141456	2	-.356065	1	-.393394	1	.164052	2	.995714
6.0	.953352	1	-.152580	2	-.388925	1	-.424519	1	.174719	2	.996395
6.5	.930814	1	-.163434	2	-.421822	1	-.455747	1	.185140	2	.996926
7.0	.910596	1	-.174032	2	-.454773	1	-.487088	1	.195329	2	.997348
7.5	.892294	1	-.184389	2	-.487789	1	-.518547	1	.205294	2	.997688
8.0	.875603	1	-.194513	2	-.520879	1	-.550129	1	.215047	2	.997968
8.5	.860280	1	-.204417	2	-.554051	1	-.581838	1	.224594	2	.998199
9.0	.846135	1	-.214107	2	-.587312	1	-.613677	1	.233944	2	.998393
9.5	.833014	1	-.223594	2	-.620665	1	-.645645	1	.243103	2	.998557
10.0	.820789	1	-.232883	2	-.654113	1	-.677745	1	.252077	2	.998698

ELECTRON Z = 71, A = 177

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.366185	2	-.137323	1	-.311078		-.801659		.373644	1	.694405
1.0	.213050	2	-.270787	1	-.618552		-.117257	1	.541743	1	.887896
1.5	.167784	2	-.413884	1	-.955742		-.150679	1	.688257	1	.945200
2.0	.146334	2	-.555932	1	-.129924	1	-.183101	1	.825870	1	.968043
2.5	.133463	2	-.694073	1	-.164250	1	-.215113	1	.957593	1	.979191
3.0	.124623	2	-.827805	1	-.198409	1	-.246926	1	.108461	2	.985411
3.5	.118021	2	-.957259	1	-.232398	1	-.278643	1	.120756	2	.989219
4.0	.112810	2	-.108272	2	-.266251	1	-.310325	1	.132689	2	.991715
4.5	.108538	2	-.120448	2	-.300009	1	-.342012	1	.144290	2	.993437
5.0	.104935	2	-.132281	2	-.333707	1	-.373735	1	.155584	2	.994674
5.5	.101832	2	-.143795	2	-.367374	1	-.405514	1	.166591	2	.995592
6.0	.991149	1	-.155011	2	-.401038	1	-.437367	1	.177330	2	.996292
6.5	.967046	1	-.165945	2	-.434717	1	-.469305	1	.187813	2	.996838
7.0	.945431	1	-.176613	2	-.468428	1	-.501339	1	.198055	2	.997272
7.5	.925874	1	-.187029	2	-.502185	1	-.533476	1	.208065	2	.997622
8.0	.908043	1	-.197205	2	-.535998	1	-.565721	1	.217854	2	.997909
8.5	.891682	1	-.207151	2	-.569875	1	-.598079	1	.227431	2	.998147
9.0	.876584	1	-.216876	2	-.603824	1	-.630552	1	.236802	2	.998347
9.5	.862584	1	-.226390	2	-.637849	1	-.663142	1	.245977	2	.998516
10.0	.849545	1	-.235699	2	-.671954	1	-.695850	1	.254960	2	.998660

ELECTRON Z = 72, A = 177

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.388459	2	-.142321	1	-.326973		-.835063		.383484	1	.689361
1.0	.225470	2	-.279042	1	-.646390		-.121993	1	.555388	1	.885242
1.5	.177101	2	-.425212	1	-.995612		-.156547	1	.704706	1	.943775
2.0	.154120	2	-.570036	1	-.135063	1	-.189995	1	.844686	1	.967180
2.5	.140308	2	-.710667	1	-.170480	1	-.222971	1	.978499	1	.978620
3.0	.130813	2	-.846637	1	-.205673	1	-.255701	1	.110739	2	.985007
3.5	.123719	2	-.978113	1	-.240647	1	-.288295	1	.123205	2	.988919
4.0	.118120	2	-.110541	2	-.275441	1	-.320819	1	.135292	2	.991483
4.5	.113529	2	-.122884	2	-.310100	1	-.353319	1	.147034	2	.993252
5.0	.109659	2	-.134870	2	-.344665	1	-.385827	1	.158458	2	.994524
5.5	.106327	2	-.146523	2	-.379168	1	-.418366	1	.169584	2	.995468
6.0	.103411	2	-.157865	2	-.413637	1	-.450956	1	.180430	2	.996188
6.5	.100825	2	-.168916	2	-.448096	1	-.483609	1	.191013	2	.996749
7.0	.985067	1	-.179691	2	-.482562	1	-.516337	1	.201345	2	.997195
7.5	.964100	1	-.190205	2	-.517050	1	-.549149	1	.211438	2	.997555
8.0	.944993	1	-.200470	2	-.551573	1	-.582051	1	.221303	2	.997850
8.5	.927467	1	-.210497	2	-.586139	1	-.615048	1	.230948	2	.998095
9.0	.911300	1	-.220297	2	-.620757	1	-.648143	1	.240382	2	.998300
9.5	.896314	1	-.229878	2	-.655433	1	-.681339	1	.249612	2	.998474
10.0	.882363	1	-.239248	2	-.690171	1	-.714637	1	.258646	2	.998622

ρ	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.411349	2	-.147352	1	-.343426		-.868771		.393146	1	.684357
1.0	.238188	2	-.287261	1	-.675023		-.126767	1	.568732	1	.882576
1.5	.186602	2	-.436389	1	-.103647	1	-.162456	1	.720705	1	.942335
2.0	.162027	2	-.583847	1	-.140317	1	-.196931	1	.862880	1	.966308
2.5	.147234	2	-.726803	1	-.176840	1	-.230871	1	.998594	1	.978041
3.0	.137055	2	-.864830	1	-.213082	1	-.264517	1	.112916	2	.984597
3.5	.129448	2	-.998131	1	-.249054	1	-.297990	1	.125530	2	.988614
4.0	.123445	2	-.112705	2	-.284803	1	-.331359	1	.137749	2	.991248
4.5	.118523	2	-.125193	2	-.320378	1	-.364675	1	.149609	2	.993066
5.0	.114375	2	-.137307	2	-.355823	1	-.397972	1	.161137	2	.994372
5.5	.110805	2	-.149075	2	-.391176	1	-.431276	1	.172355	2	.995342
6.0	.107682	2	-.160520	2	-.426466	1	-.464608	1	.183284	2	.996082
6.5	.104914	2	-.171661	2	-.461719	1	-.497982	1	.193939	2	.996658
7.0	.102433	2	-.182516	2	-.496955	1	-.531412	1	.204333	2	.997117
7.5	.100190	2	-.193099	2	-.532190	1	-.564907	1	.214480	2	.997487
8.0	.981473	1	-.203425	2	-.567438	1	-.598474	1	.224391	2	.997790
8.5	.962742	1	-.213504	2	-.602710	1	-.632118	1	.234075	2	.998042
9.0	.945471	1	-.223348	2	-.638013	1	-.665845	1	.243540	2	.998253
9.5	.929468	1	-.232966	2	-.673356	1	-.699657	1	.252795	2	.998431
10.0	.914576	1	-.242366	2	-.708744	1	-.733557	1	.261848	2	.998584

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin \Delta$
.5	.436273	2	-.152679	1	-.360850		-.904342		.403354	1	.679393
1.0	.252021	2	-.295962	1	-.705213		-.131800	1	.582843	1	.879897
1.5	.196921	2	-.448222	1	-.107941	1	-.168674	1	.737642	1	.940883
2.0	.170603	2	-.598475	1	-.145824	1	-.204218	1	.882159	1	.965426
2.5	.154736	2	-.743905	1	-.183491	1	-.239157	1	.101991	2	.977456
3.0	.143811	2	-.884128	1	-.220813	1	-.273750	1	.115228	2	.984182
3.5	.135644	2	-.101939	2	-.257810	1	-.308125	1	.128003	2	.988305
4.0	.129198	2	-.115006	2	-.294536	1	-.342361	1	.140366	2	.991009
4.5	.123915	2	-.127650	2	-.331045	1	-.376511	1	.152355	2	.992876
5.0	.119464	2	-.139906	2	-.367387	1	-.410612	1	.163999	2	.994218
5.5	.115635	2	-.151801	2	-.403601	1	-.444693	1	.175322	2	.995214
6.0	.112286	2	-.163360	2	-.439722	1	-.478777	1	.186344	2	.995974
6.5	.109319	2	-.174603	2	-.475776	1	-.512880	1	.197083	2	.996567
7.0	.106661	2	-.185549	2	-.511787	1	-.547017	1	.207552	2	.997037
7.5	.104260	2	-.196215	2	-.547772	1	-.581198	1	.217765	2	.997418
8.0	.102073	2	-.206613	2	-.583746	1	-.615431	1	.227733	2	.997729
8.5	.100069	2	-.216757	2	-.619721	1	-.649724	1	.237467	2	.997988
9.0	.982224	1	-.226657	2	-.655708	1	-.684081	1	.246977	2	.998205
9.5	.965118	1	-.236324	2	-.691713	1	-.718507	1	.256269	2	.998388
10.0	.949204	1	-.245767	2	-.727745	1	-.753003	1	.265353	2	.998545

ELECTRON Z = 75, A = 185

p	F_o		f_1		g_1	f_{-1}		g_{-1}		Sin Δ
.5	.462921	2	-.158228	1	-.379167	-.941334		.413880	1	.674470
1.0	.266781	2	-.304989	1	-.736792	-.137029	1	.597384	1	.877207
1.5	.207905	2	-.460464	1	-.112416	-.175125	1	.755073	1	.939418
2.0	.179711	2	-.613572	1	-.151549	-.211766	1	.901976	1	.964535
2.5	.162688	2	-.761520	1	-.190391	-.247727	1	.104179	2	.976864
3.0	.150958	2	-.903971	1	-.228820	-.283286	1	.117598	2	.983762
3.5	.142187	2	-.104121	2	-.266866	-.318582	1	.130535	2	.987993
4.0	.135266	2	-.117364	2	-.304588	-.353700	1	.143042	2	.990768
4.5	.129594	2	-.130167	2	-.342049	-.388695	1	.155161	2	.992685
5.0	.124818	2	-.142564	2	-.379301	-.423612	1	.166921	2	.994062
5.5	.120710	2	-.154586	2	-.416389	-.458479	1	.178347	2	.995085
6.0	.117119	2	-.166257	2	-.453351	-.493323	1	.189461	2	.995865
6.5	.113939	2	-.177602	2	-.490216	-.528162	1	.200282	2	.996474
7.0	.111092	2	-.188639	2	-.527009	-.563011	1	.210824	2	.996957
7.5	.108521	2	-.199384	2	-.563750	-.597883	1	.221101	2	.997348
8.0	.106181	2	-.209854	2	-.600456	-.632786	1	.231125	2	.997668
8.5	.104037	2	-.220060	2	-.637139	-.667730	1	.240908	2	.997933
9.0	.102062	2	-.230014	2	-.673811	-.702719	1	.250458	2	.998156
9.5	.100233	2	-.239728	2	-.710482	-.737758	1	.259786	2	.998345
10.0	.985331	1	-.249211	2	-.747158	-.772851	1	.263898	2	.998506

ELECTRON Z = 76, A = 188

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.491136	2	-.163956	1	-.398342		-.979494		.424597	1	.669589
1.0	.282372	2	-.314257	1	-.769670		-.142416	1	.612164	1	.874505
1.5	.219472	2	-.472973	1	-.117059	1	-.181762	1	.772749	1	.937940
2.0	.189275	2	-.628939	1	-.157472	1	-.219520	1	.922016	1	.963634
2.5	.171017	2	-.779391	1	-.197515	1	-.256519	1	.106386	2	.976265
3.0	.158427	2	-.924040	1	-.237073	1	-.293058	1	.119982	2	.983337
3.5	.149012	2	-.106322	2	-.276186	1	-.329286	1	.133075	2	.987676
4.0	.141583	2	-.119736	2	-.314921	1	-.365294	1	.145721	2	.990524
4.5	.135497	2	-.132691	2	-.353346	1	-.401144	1	.157962	2	.992490
5.0	.130374	2	-.145223	2	-.391521	1	-.436882	1	.169830	2	.993904
5.5	.125970	2	-.157364	2	-.429495	1	-.472542	1	.181352	2	.994954
6.0	.122122	2	-.169141	2	-.467307	1	-.508150	1	.192550	2	.995755
6.5	.118715	2	-.180579	2	-.504990	1	-.543728	1	.203444	2	.996380
7.0	.115667	2	-.191698	2	-.542572	1	-.579293	1	.214049	2	.996876
7.5	.112916	2	-.202515	2	-.580074	1	-.614857	1	.224381	2	.997277
8.0	.110413	2	-.213046	2	-.617516	1	-.650432	1	.234452	2	.997605
8.5	.108121	2	-.223305	2	-.654911	1	-.686027	1	.244273	2	.997878
9.0	.106010	2	-.233304	2	-.692272	1	-.721648	1	.253855	2	.998107
9.5	.104057	2	-.243055	2	-.729610	1	-.757301	1	.263207	2	.998300
10.0	.102242	2	-.252567	2	-.766933	1	-.792991	1	.272338	2	.998466

ELECTRON   Z = 77, A = 193

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.520689	2	-.169815	1	-.418311		-.101851	1	.435355	1	.664750
1.0	.298653	2	-.323661	1	-.803710		-.147917	1	.626961	1	.871793
1.5	.231510	2	-.485586	1	-.121847	1	-.188528	1	.790381	1	.936449
2.0	.199194	2	-.644350	1	-.163564	1	-.227413	1	.941927	1	.962724
2.5	.179628	2	-.797224	1	-.204825	1	-.265457	1	.108570	2	.975659
3.0	.166129	2	-.943974	1	-.245528	1	-.302979	1	.122332	2	.982907
3.5	.156033	2	-.108498	2	-.285719	1	-.340142	1	.135568	2	.987356
4.0	.148067	2	-.122072	2	-.325478	1	-.377042	1	.148339	2	.990277
4.5	.141544	2	-.135166	2	-.364877	1	-.413748	1	.160688	2	.992294
5.0	.136054	2	-.147818	2	-.403982	1	-.450307	1	.172649	2	.993744
5.5	.131338	2	-.160064	2	-.442846	1	-.486758	1	.184251	2	.994822
6.0	.127219	2	-.171932	2	-.481512	1	-.523130	1	.195517	2	.995643
6.5	.123574	2	-.183447	2	-.520018	1	-.559445	1	.206468	2	.996284
7.0	.120315	2	-.194631	2	-.558391	1	-.595723	1	.217120	2	.996794
7.5	.117374	2	-.205503	2	-.596657	1	-.631978	1	.227489	2	.997205
8.0	.114701	2	-.216078	2	-.634836	1	-.668222	1	.237588	2	.997542
8.5	.112253	2	-.226372	2	-.672944	1	-.704465	1	.247430	2	.997822
9.0	.110001	2	-.236398	2	-.710994	1	-.740715	1	.257025	2	.998057
9.5	.107917	2	-.246168	2	-.748999	1	-.776978	1	.266383	2	.998255
10.0	.105981	2	-.255692	2	-.786967	1	-.813259	1	.275513	2	.998425

ELECTRON Z = 78, A = 194

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.553611	2	-.176138	1	-.439685		-.106042	1	.447037	1	.659953
1.0	.316783	2	-.333847	1	-.840024		-.153820	1	.643069	1	.869071
1.5	.244906	2	-.499291	1	-.126940	1	-.195778	1	.809636	1	.934946
2.0	.210227	2	-.661149	1	-.170028	1	-.235857	1	.963748	1	.961805
2.5	.189204	2	-.816729	1	-.212565	1	-.275002	1	.110971	2	.975046
3.0	.174691	2	-.965855	1	-.254461	1	-.313557	1	.124926	2	.982472
3.5	.163835	2	-.110896	2	-.295773	1	-.351697	1	.138332	2	.987032
4.0	.155272	2	-.124656	2	-.336589	1	-.389526	1	.151253	2	.990026
4.5	.148262	2	-.137914	2	-.376992	1	-.427118	1	.163736	2	.992095
5.0	.142366	2	-.150714	2	-.417052	1	-.464526	1	.175817	2	.993582
5.5	.137302	2	-.163091	2	-.456827	1	-.501792	1	.187525	2	.994687
6.0	.132882	2	-.175076	2	-.496365	1	-.538947	1	.198886	2	.995530
6.5	.128974	2	-.186695	2	-.535706	1	-.576016	1	.209920	2	.996188
7.0	.125481	2	-.197972	2	-.574882	1	-.613021	1	.220646	2	.996710
7.5	.122330	2	-.208925	2	-.613919	1	-.649977	1	.231079	2	.997132
8.0	.119467	2	-.219572	2	-.652840	1	-.686898	1	.241235	2	.997478
8.5	.116847	2	-.229929	2	-.691663	1	-.723796	1	.251125	2	.997765
9.0	.114438	2	-.240010	2	-.730404	1	-.760679	1	.260761	2	.998006
9.5	.112210	2	-.249826	2	-.769074	1	-.797554	1	.270154	2	.998210
10.0	.110141	2	-.259390	2	-.807685	1	-.834428	1	.279312	2	.998384

ELECTRON $Z = 79$, $A = 197$

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.588196	2	-.182613	1	-.461965		-.110331	1	.458785	1	.655198
1.0	.335771	2	-.344199	1	-.877656		-.159854	1	.659225	1	.866340
1.5	.258886	2	-.513133	1	-.132197	1	-.203177	1	.828881	1	.933432
2.0	.221703	2	-.678026	1	-.176680	1	-.244461	1	.985469	1	.960876
2.5	.199132	2	-.836230	1	-.220514	1	-.284713	1	.113353	2	.974426
3.0	.183544	2	-.987633	1	-.263617	1	-.324305	1	.127487	2	.982031
3.5	.171883	2	-.113272	2	-.306063	1	-.363424	1	.141051	2	.986704
4.0	.162688	2	-.127205	2	-.347947	1	-.402183	1	.154109	2	.989773
4.5	.155163	2	-.140616	2	-.389361	1	-.440662	1	.166711	2	.991893
5.0	.148836	2	-.153549	2	-.430382	1	-.478918	1	.178896	2	.993418
5.5	.143406	2	-.166042	2	-.471073	1	-.516997	1	.190695	2	.994551
6.0	.138669	2	-.178128	2	-.511487	1	-.554933	1	.202133	2	.995416
6.5	.134482	2	-.189835	2	-.551666	1	-.592754	1	.213234	2	.996090
7.0	.130742	2	-.201187	2	-.591646	1	-.630482	1	.224016	2	.996626
7.5	.127371	2	-.212205	2	-.631455	1	-.668136	1	.234497	2	.997059
8.0	.124309	2	-.222907	2	-.671119	1	-.705730	1	.244691	2	.997413
8.5	.121509	2	-.233309	2	-.710657	1	-.743278	1	.254611	2	.997708
9.0	.118934	2	-.243426	2	-.750086	1	-.780789	1	.264270	2	.997955
9.5	.116555	2	-.253271	2	-.789420	1	-.818271	1	.273678	2	.998164
10.0	.114346	2	-.262855	2	-.828672	1	-.855732	1	.282846	2	.998342

ELECTRON Z = 80, A = 198

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.626043	2	-.189488	1	-.485631		-.114870	1	.471233	1	.650486
1.0	.356522	2	-.355187	1	-.917469		-.166233	1	.676354	1	.863600
1.5	.274140	2	-.527824	1	-.137741	1	-.210986	1	.849302	1	.931905
2.0	.234204	2	-.695943	1	-.183678	1	-.253528	1	.100854	2	.959939
2.5	.209934	2	-.856946	1	-.228857	1	-.294932	1	.115885	2	.973800
3.0	.193164	2	-.101079	2	-.273211	1	-.335599	1	.130215	2	.981586
3.5	.180620	2	-.115801	2	-.316825	1	-.375729	1	.143949	2	.986372
4.0	.170731	2	-.129922	2	-.359808	1	-.415446	1	.157158	2	.989516
4.5	.162642	2	-.143499	2	-.402259	1	-.454836	1	.169893	2	.991689
5.0	.155845	2	-.156578	2	-.444263	1	-.493961	1	.182195	2	.993252
5.5	.150014	2	-.169201	2	-.485889	1	-.532871	1	.194097	2	.994414
6.0	.144930	2	-.181401	2	-.527194	1	-.571603	1	.205626	2	.995300
6.5	.140439	2	-.193209	2	-.568224	1	-.610188	1	.216806	2	.995991
7.0	.136430	2	-.204650	2	-.609019	1	-.648651	1	.227658	2	.996540
7.5	.132817	2	-.215745	2	-.649609	1	-.687011	1	.238198	2	.996984
8.0	.129538	2	-.226514	2	-.690022	1	-.725286	1	.248443	2	.997348
8.5	.126541	2	-.236975	2	-.730280	1	-.763489	1	.258407	2	.997650
9.0	.123787	2	-.247141	2	-.770401	1	-.801633	1	.268101	2	.997903
9.5	.121243	2	-.257028	2	-.810401	1	-.839725	1	.277538	2	.998117
10.0	.118883	2	-.266646	2	-.850294	1	-.877775	1	.286728	2	.998300

ELECTRON Z = 81, A = 203

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.664989	2	-.196396	1	-.510041		-.119432	1	.483405	1	.645817
1.0	.377790	2	-.366103	1	-.958248		-.172633	1	.693026	1	.860852
1.5	.289699	2	-.542276	1	-.143393	1	-.218807	1	.869055	1	.930367
2.0	.246898	2	-.713416	1	-.190788	1	-.262590	1	.103071	2	.958992
2.5	.220857	2	-.876987	1	-.237312	1	-.305129	1	.118301	2	.973167
3.0	.202857	2	-.103302	2	-.282913	1	-.346851	1	.132798	2	.981136
3.5	.189394	2	-.118211	2	-.327691	1	-.387974	1	.146675	2	.986037
4.0	.178783	2	-.132492	2	-.371766	1	-.428630	1	.160004	2	.989257
4.5	.170108	2	-.146205	2	-.415246	1	-.468912	1	.172842	2	.991483
5.0	.162822	2	-.159401	2	-.458225	1	-.508888	1	.185229	2	.993084
5.5	.156576	2	-.172122	2	-.500776	1	-.548610	1	.197202	2	.994274
6.0	.151133	2	-.184405	2	-.542962	1	-.588120	1	.208790	2	.995182
6.5	.146328	2	-.196281	2	-.584834	1	-.627452	1	.220016	2	.995890
7.0	.142041	2	-.207777	2	-.626432	1	-.666631	1	.230903	2	.996454
7.5	.138180	2	-.218916	2	-.667793	1	-.705680	1	.241468	2	.996909
8.0	.134677	2	-.229718	2	-.708944	1	-.744618	1	.251729	2	.997281
8.5	.131478	2	-.240201	2	-.749910	1	-.783460	1	.261701	2	.997591
9.0	.128539	2	-.250382	2	-.790712	1	-.822219	1	.271395	2	.997850
9.5	.125826	2	-.260274	2	-.831367	1	-.860905	1	.280825	2	.998070
10.0	.123310	2	-.269891	2	-.871889	1	-.899527	1	.290001	2	.998258

ELECTRON Z = 82, A = 208

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.706715	2	-.203592	1	-.535699		-.124173	1	.495951	1	.641191
1.0	.400523	2	-.377427	1	-.100089	1	-.179274	1	.710189	1	.858097
1.5	.306285	2	-.557218	1	-.149281	1	-.226909	1	.889358	1	.928817
2.0	.260395	2	-.731433	1	-.198174	1	-.271962	1	.105345	2	.958037
2.5	.232444	2	-.897603	1	-.246074	1	-.315657	1	.120776	2	.972528
3.0	.213118	2	-.105583	2	-.292947	1	-.358451	1	.135441	2	.980681
3.5	.198664	2	-.120680	2	-.338907	1	-.400579	1	.149458	2	.985697
4.0	.187277	2	-.135120	2	-.384089	1	-.442183	1	.162907	2	.988994
4.5	.177972	2	-.148969	2	-.428610	1	-.483363	1	.175844	2	.991274
5.0	.170162	2	-.162279	2	-.472571	1	-.524194	1	.188315	2	.992914
5.5	.163470	2	-.175096	2	-.516054	1	-.564731	1	.200357	2	.994133
6.0	.157642	2	-.187459	2	-.559125	1	-.605020	1	.211999	2	.995063
6.5	.152501	2	-.199400	2	-.601839	1	-.645097	1	.223268	2	.995789
7.0	.147916	2	-.210948	2	-.644242	1	-.684990	1	.234186	2	.996366
7.5	.143790	2	-.222127	2	-.686371	1	-.724725	1	.244773	2	.996832
8.0	.140049	2	-.232959	2	-.728257	1	-.764322	1	.255047	2	.997214
8.5	.136633	2	-.243462	2	-.769928	1	-.803797	1	.265022	2	.997531
9.0	.133498	2	-.253653	2	-.811405	1	-.843164	1	.274713	2	.997797
9.5	.130604	2	-.263547	2	-.852707	1	-.882436	1	.284132	2	.998022
10.0	.127922	2	-.273158	2	-.893851	1	-.921623	1	.293290	2	.998214

ELECTRON   Z = 83, A = 210

p	F_o		f_1		g_1		f_{-1}		g_{-1}	Sin Δ
.5	.752899	2	-.211306	1	-.563105		-.129236	1	.509430	1	.636608
1.0	.425656	2	-.389584	1	-.104629	1	-.186359	1	.728656	1	.855334
1.5	.324601	2	-.573285	1	-.155531	1	-.235540	1	.911249	1	.927257
2.0	.275282	2	-.750841	1	-.205995	1	-.281931	1	.107803	2	.957072
2.5	.245214	2	-.919857	1	-.255334	1	-.326839	1	.123457	2	.971882
3.0	.224417	2	-.108052	2	-.303531	1	-.370756	1	.138311	2	.980221
3.5	.208866	2	-.123358	2	-.350720	1	-.413931	1	.152491	2	.985354
4.0	.196620	2	-.137980	2	-.397046	1	-.456520	1	.166080	2	.988729
4.5	.186619	2	-.151984	2	-.442642	1	-.498632	1	.179138	2	.991063
5.0	.178229	2	-.165430	2	-.487615	1	-.540346	1	.191712	2	.992742
5.5	.171045	2	-.178364	2	-.532053	1	-.581723	1	.203842	2	.993991
6.0	.164793	2	-.190827	2	-.576030	1	-.622813	1	.215559	2	.994943
6.5	.159280	2	-.202854	2	-.619605	1	-.663653	1	.226892	2	.995686
7.0	.154368	2	-.214475	2	-.662827	1	-.704278	1	.237862	2	.996277
7.5	.149950	2	-.225715	2	-.705736	1	-.744713	1	.248492	2	.996755
8.0	.145945	2	-.236597	2	-.748368	1	-.784980	1	.258798	2	.997146
8.5	.142292	2	-.247140	2	-.790751	1	-.825098	1	.268799	2	.997471
9.0	.138940	2	-.257362	2	-.832910	1	-.865083	1	.278507	2	.997743
9.5	.135848	2	-.267280	2	-.874866	1	-.904948	1	.287936	2	.997974
10.0	.132984	2	-.276906	2	-.916636	1	-.944704	1	.297097	2	.998171

ELECTRON Z = 84, A = 210

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.803626	2	-.219511	1	-.592279		-.134603	1	.523736	1	.632068
1.0	.453217	2	-.402510	1	-.109443	1	-.193863	1	.748266	1	.852565
1.5	.344649	2	-.590363	1	-.162139	1	-.244668	1	.934513	1	.925685
2.0	.291551	2	-.771475	1	-.214244	1	-.292460	1	.110418	2	.956099
2.5	.259147	2	-.943530	1	-.265080	1	-.338633	1	.126311	2	.971230
3.0	.236731	2	-.110681	2	-.314651	1	-.383714	1	.141371	2	.979756
3.5	.219973	2	-.126213	2	-.363109	1	-.427975	1	.155729	2	.985007
4.0	.206782	2	-.141031	2	-.410618	1	-.471583	1	.169472	2	.988460
4.5	.196015	2	-.155207	2	-.457319	1	-.514654	1	.182664	2	.990849
5.0	.186989	2	-.168802	2	-.503330	1	-.557277	1	.195356	2	.992568
5.5	.179265	2	-.181867	2	-.548748	1	-.599516	1	.207588	2	.993846
6.0	.172548	2	-.194445	2	-.593651	1	-.641425	1	.219394	2	.994822
6.5	.166630	2	-.206571	2	-.638103	1	-.683047	1	.230803	2	.995582
7.0	.161358	2	-.218278	2	-.682158	1	-.724417	1	.241839	2	.996188
7.5	.156621	2	-.229593	2	-.725862	1	-.765564	1	.252524	2	.996676
8.0	.152329	2	-.240538	2	-.769250	1	-.806513	1	.262877	2	.997077
8.5	.148417	2	-.251135	2	-.812354	1	-.847284	1	.272916	2	.997410
9.0	.144828	2	-.261403	2	-.855202	1	-.887894	1	.282655	2	.997688
9.5	.141520	2	-.271357	2	-.897817	1	-.928359	1	.292108	2	.997925
10.0	.138457	2	-.281013	2	-.940217	1	-.968691	1	.301287	2	.998126

ELECTRON Z = 85, A = 212

p	F_0		f_1		g_1		f_{-1}		g_{-1}		$\sin\Delta$
.5	.857153	2	-.227924	1	-.622697		-.140098	1	.538134	1	.627571
1.0	.482204	2	-.415663	1	-.114433	1	-.201531	1	.767942	1	.849790
1.5	.365654	2	-.607629	1	-.168957	1	-.253978	1	.957765	1	.924102
2.0	.308534	2	-.792217	1	-.222727	1	-.303177	1	.113020	2	.955117
2.5	.273644	2	-.967203	1	-.275075	1	-.350614	1	.129141	2	.970571
3.0	.249505	2	-.113297	2	-.326029	1	-.396857	1	.144391	2	.979286
3.5	.231464	2	-.129040	2	-.375763	1	-.442197	1	.158911	2	.984656
4.0	.217270	2	-.144039	2	-.424454	1	-.486816	1	.172791	2	.988189
4.5	.205692	2	-.158371	2	-.472259	1	-.530838	1	.186101	2	.990633
5.0	.195992	2	-.172098	2	-.519305	1	-.574357	1	.198892	2	.992392
5.5	.187697	2	-.185277	2	-.565697	1	-.617447	1	.211207	2	.993700
6.0	.180489	2	-.197950	2	-.611518	1	-.660163	1	.223083	2	.994698
6.5	.174142	2	-.210158	2	-.656840	1	-.702553	1	.234549	2	.995477
7.0	.168492	2	-.221932	2	-.701720	1	-.744654	1	.245631	2	.996097
7.5	.163418	2	-.233301	2	-.746206	1	-.786499	1	.256352	2	.996597
8.0	.158825	2	-.244290	2	-.790339	1	-.828115	1	.266732	2	.997007
8.5	.154639	2	-.254921	2	-.834153	1	-.869523	1	.276788	2	.997348
9.0	.150803	2	-.265213	2	-.877678	1	-.910743	1	.286538	2	.997633
9.5	.147268	2	-.275184	2	-.920938	1	-.951792	1	.295994	2	.997875
10.0	.143997	2	-.284849	2	-.963955	1	-.992684	1	.305170	2	.998082

ELECTRON   Z = 86, A = 215

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.914164	2	-.236624	1	-.654554		-.145765	1	.552798	1	.623117
1.0	.512985	2	-.429182	1	-.119629	1	-.209428	1	.787936	1	.847010
1.5	.387882	2	-.625282	1	-.176027	1	-.263547	1	.981323	1	.922510
2.0	.326447	2	-.813331	1	-.231495	1	-.314170	1	.115648	2	.954127
2.5	.288891	2	-.991206	1	-.285379	1	-.362882	1	.131989	2	.969905
3.0	.262904	2	-.115939	2	-.337733	1	-.410292	1	.147422	2	.978811
3.5	.243489	2	-.131887	2	-.388752	1	-.456714	1	.162094	2	.984301
4.0	.228222	2	-.147058	2	-.438634	1	-.502341	1	.176102	2	.987914
4.5	.215777	2	-.161535	2	-.487546	1	-.547310	1	.189518	2	.990414
5.0	.205358	2	-.175385	2	-.535627	1	-.591722	1	.202397	2	.992214
5.5	.196455	2	-.188665	2	-.582990	1	-.635654	1	.214785	2	.993553
6.0	.188723	2	-.201424	2	-.629727	1	-.679169	1	.226719	2	.994574
6.5	.181921	2	-.213700	2	-.675912	1	-.722317	1	.238230	2	.995371
7.0	.175870	2	-.225529	2	-.721609	1	-.765139	1	.249345	2	.996005
7.5	.170438	2	-.236941	2	-.766870	1	-.807671	1	.260090	2	.996517
8.0	.165525	2	-.247962	2	-.811738	1	-.849941	1	.270484	2	.996937
8.5	.161050	2	-.258614	2	-.856251	1	-.891974	1	.280546	2	.997285
9.0	.156951	2	-.268919	2	-.900441	1	-.933792	1	.290293	2	.997578
9.5	.153177	2	-.278893	2	-.944334	1	-.975411	1	.299740	2	.997825
10.0	.149686	2	-.288554	2	-.987955	1	-.101685	2	.308900	2	.998036

ELECTRON Z = 87, A = 217

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.976225	2	-.245795	1	-.688299		-.151722	1	.568159	1	.618706
1.0	.546419	2	-.443402	1	-.125109	1	-.217717	1	.808869	1	.844224
1.5	.411969	2	-.643816	1	-.183459	1	-.273575	1	.100598	2	.920906
2.0	.345814	2	-.835467	1	-.240685	1	-.325671	1	.118397	2	.953128
2.5	.305342	2	-.101635	2	-.296154	1	-.375697	1	.134968	2	.969233
3.0	.277337	2	-.118706	2	-.349947	1	-.424306	1	.150591	2	.978331
3.5	.256421	2	-.134866	2	-.402285	1	-.471834	1	.165422	2	.983943
4.0	.239984	2	-.150217	2	-.453383	1	-.518491	1	.179564	2	.987637
4.5	.226595	2	-.164845	2	-.503424	1	-.564425	1	.193092	2	.990193
5.0	.215393	2	-.178824	2	-.552558	1	-.609743	1	.206065	2	.992034
5.5	.205829	2	-.192212	2	-.600907	1	-.654530	1	.218530	2	.993403
6.0	.197529	2	-.205060	2	-.648569	1	-.698853	1	.230526	2	.994448
6.5	.190232	2	-.217410	2	-.695627	1	-.742767	1	.242087	2	.995264
7.0	.183745	2	-.229300	2	-.742148	1	-.786316	1	.253241	2	.995912
7.5	.177927	2	-.240759	2	-.788188	1	-.829539	1	.264014	2	.996436
8.0	.172667	2	-.251816	2	-.833795	1	-.872466	1	.274427	2	.996866
8.5	.167880	2	-.262495	2	-.879008	1	-.915125	1	.284499	2	.997222
9.0	.163497	2	-.272816	2	-.923864	1	-.957539	1	.294249	2	.997521
9.5	.159464	2	-.282799	2	-.968390	1	-.999728	1	.303691	2	.997774
10.0	.155736	2	-.292461	2	-.101261	2	-.104171	2	.312840	2	.997991

ELECTRON Z = 88, A = 221

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.104168	3	-.255186	1	-.723433		-.157807	1	.583575	1	.614338
1.0	.581558	2	-.457845	1	-.130779	1	-.226166	1	.829806	1	.841434
1.5	.437179	2	-.662507	1	-.191110	1	-.283773	1	.103053	2	.919293
2.0	.366004	2	-.857652	1	-.250111	1	-.337341	1	.121122	2	.952121
2.5	.322432	2	-.104140	2	-.307172	1	-.388673	1	.137906	2	.968555
3.0	.292282	2	-.121447	2	-.362406	1	-.438466	1	.153701	2	.977847
3.5	.269774	2	-.137802	2	-.416057	1	-.487085	1	.168673	2	.983581
4.0	.252097	2	-.153314	2	-.468363	1	-.534755	1	.182929	2	.987356
4.5	.237708	2	-.168075	2	-.519521	1	-.581633	1	.196549	2	.989970
5.0	.225680	2	-.182162	2	-.569693	1	-.627836	1	.209595	2	.991853
5.5	.215418	2	-.195637	2	-.619011	1	-.673456	1	.222116	2	.993252
6.0	.206519	2	-.208554	2	-.667582	1	-.718564	1	.234153	2	.994321
6.5	.198701	2	-.220958	2	-.715493	1	-.763220	1	.245743	2	.995155
7.0	.191757	2	-.232885	2	-.762818	1	-.807472	1	.256914	2	.995818
7.5	.185533	2	-.244371	2	-.809616	1	-.851361	1	.267693	2	.996354
8.0	.179909	2	-.255442	2	-.855939	1	-.894921	1	.278102	2	.996794
8.5	.174794	2	-.266124	2	-.901831	1	-.938181	1	.288163	2	.997158
9.0	.170115	2	-.276440	2	-.947329	1	-.981167	1	.297893	2	.997464
9.5	.165811	2	-.286410	2	-.992464	1	-.102390	2	.307309	2	.997723
10.0	.161834	2	-.296050	2	-.103727	2	-.106640	2	.316425	2	.997944

ELECTRON Z = 89, A = 226

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.111141	3	-.264889	1	-.760198		-.164074	1	.599252	1	.610014
1.0	.618873	2	-.472675	1	-.136678	1	-.234854	1	.851040	1	.838640
1.5	.463853	2	-.681593	1	-.199035	1	-.294236	1	.105534	2	.917670
2.0	.387294	2	-.880195	1	-.259840	1	-.349288	1	.123867	2	.951106
2.5	.340395	2	-.106674	2	-.318511	1	-.401928	1	.140855	2	.967871
3.0	.307947	2	-.124209	2	-.375193	1	-.452905	1	.156812	2	.977358
3.5	.283735	2	-.140749	2	-.430162	1	-.502608	1	.171913	2	.983215
4.0	.264733	2	-.156411	2	-.483673	1	-.551281	1	.186271	2	.987073
4.5	.249278	2	-.171293	2	-.535943	1	-.599092	1	.199971	2	.989744
5.0	.236368	2	-.185476	2	-.587146	1	-.646167	1	.213076	2	.991669
5.5	.225363	2	-.199026	2	-.637423	1	-.692605	1	.225640	2	.993100
6.0	.215827	2	-.211998	2	-.686889	1	-.738482	1	.237706	2	.994192
6.5	.207456	2	-.224441	2	-.735639	1	-.783863	1	.249310	2	.995045
7.0	.200027	2	-.236394	2	-.783752	1	-.828799	1	.260485	2	.995723
7.5	.193372	2	-.247891	2	-.831291	1	-.873335	1	.271256	2	.996271
8.0	.187363	2	-.258963	2	-.878313	1	-.917508	1	.281649	2	.996721
8.5	.181902	2	-.269636	2	-.924864	1	-.961349	1	.291684	2	.997093
9.0	.176909	2	-.279933	2	-.970984	1	-.100489	2	.301381	2	.997406
9.5	.172319	2	-.289875	2	-.101671	2	-.104814	2	.310756	2	.997671
10.0	.168081	2	-.299480	2	-.106207	2	-.109114	2	.319826	2	.997897

ELECTRON Z = 90, A = 228

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.118909	3	-.275327	1	-.799627		-.170792	1	.616159	1	.605731
1.0	.660377	2	-.488650	1	-.142985	1	-.244157	1	.873971	1	.835843
1.5	.493478	2	-.702182	1	-.207485	1	-.305427	1	.108220	2	.916038
2.0	.410908	2	-.904559	1	-.270192	1	-.362049	1	.126844	2	.950082
2.5	.360298	2	-.109420	2	-.330554	1	-.416071	1	.144063	2	.967180
3.0	.325289	2	-.127209	2	-.388755	1	-.468293	1	.160207	2	.976864
3.5	.299179	2	-.143959	2	-.445099	1	-.519136	1	.175460	2	.982845
4.0	.278703	2	-.159796	2	-.499867	1	-.568859	1	.189944	2	.986786
4.5	.262061	2	-.174822	2	-.553293	1	-.617645	1	.203745	2	.989516
5.0	.248173	2	-.189123	2	-.605565	1	-.665630	1	.216933	2	.991483
5.5	.236344	2	-.202770	2	-.656835	1	-.712919	1	.229562	2	.992945
6.0	.226103	2	-.215821	2	-.707228	1	-.759596	1	.241678	2	.994062
6.5	.217119	2	-.228325	2	-.756844	1	-.805729	1	.253319	2	.994934
7.0	.209152	2	-.240325	2	-.805768	1	-.851375	1	.264518	2	.995627
7.5	.202021	2	-.251857	2	-.854070	1	-.896581	1	.275304	2	.996188
8.0	.195587	2	-.262952	2	-.901810	1	-.941387	1	.285702	2	.996647
8.5	.189743	2	-.273637	2	-.949038	1	-.985828	1	.295734	2	.997028
9.0	.184403	2	-.283937	2	-.995798	1	-.102993	2	.305420	2	.997348
9.5	.179498	2	-.293874	2	-.104213	2	-.107373	2	.314778	2	.997619
10.0	.174972	2	-.303467	2	-.108805	2	-.111723	2	.323823	2	.997850

ELECTRON Z = 91, A = 234

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.126937	3	-.285801	1	-.840160		-.177512	1	.632617	1	.601492
1.0	.703073	2	-.504487	1	-.149418	1	-.253438	1	.896166	1	.833043
1.5	.523789	2	-.722369	1	-.216051	1	-.316555	1	.110800	2	.914395
2.0	.434942	2	-.928207	1	-.280634	1	-.374700	1	.129681	2	.949051
2.5	.380459	2	-.112059	2	-.342653	1	-.430050	1	.147093	2	.966483
3.0	.342777	2	-.130065	2	-.402332	1	-.483462	1	.163386	2	.976365
3.5	.314692	2	-.146988	2	-.460007	1	-.535387	1	.178753	2	.982472
4.0	.292684	2	-.162960	2	-.515986	1	-.586103	1	.193322	2	.986497
4.5	.274812	2	-.178091	2	-.570520	1	-.635807	1	.207185	2	.989286
5.0	.259910	2	-.192471	2	-.623811	1	-.684644	1	.220415	2	.991295
5.5	.247229	2	-.206174	2	-.676025	1	-.732728	1	.233068	2	.992789
6.0	.236259	2	-.219262	2	-.727292	1	-.780147	1	.245193	2	.993931
6.5	.226644	2	-.231787	2	-.777723	1	-.826976	1	.256830	2	.994822
7.0	.218124	2	-.243793	2	-.827408	1	-.873275	1	.268013	2	.995530
7.5	.210504	2	-.255317	2	-.876421	1	-.919096	1	.278773	2	.996103
8.0	.203634	2	-.266393	2	-.924828	1	-.964481	1	.289135	2	.996572
8.5	.197398	2	-.277050	2	-.972681	1	-.100947	2	.299123	2	.996962
9.0	.191704	2	-.287312	2	-.102003	2	-.105409	2	.308758	2	.997289
9.5	.186476	2	-.297202	2	-.106691	2	-.109837	2	.318057	2	.997566
10.0	.181655	2	-.306741	2	-.111336	2	-.114233	2	.327037	2	.997802

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.136188	3	-.297419	1	-.884489		-.184938	1	.651173	1	.597294
1.0	.752261	2	-.522174	1	-.156447	1	-.263692	1	.921295	1	.830240
1.5	.558710	2	-.745065	1	-.225402	1	-.328849	1	.113739	2	.912744
2.0	.462638	2	-.954977	1	-.292023	1	-.388673	1	.132935	2	.948011
2.5	.403700	2	-.115068	2	-.355839	1	-.445485	1	.150596	2	.965780
3.0	.362949	2	-.133348	2	-.417120	1	-.500207	1	.167090	2	.975861
3.5	.332596	2	-.150497	2	-.476237	1	-.553321	1	.182622	2	.982095
4.0	.308829	2	-.166656	2	-.533526	1	-.605129	1	.197327	2	.986205
4.5	.289547	2	-.181943	2	-.589257	1	-.655841	1	.211302	2	.989053
5.0	.273484	2	-.196452	2	-.643651	1	-.705614	1	.224623	2	.991105
5.5	.259827	2	-.210262	2	-.696884	1	-.754570	1	.237350	2	.992632
6.0	.248023	2	-.223438	2	-.749097	1	-.802805	1	.249534	2	.993798
6.5	.237686	2	-.236034	2	-.800409	1	-.850398	1	.261216	2	.994708
7.0	.228534	2	-.248095	2	-.850916	1	-.897415	1	.272433	2	.995432
7.5	.220354	2	-.259663	2	-.900699	1	-.943911	1	.283216	2	.996017
8.0	.212985	2	-.270770	2	-.949827	1	-.989933	1	.293592	2	.996497
8.5	.206302	2	-.281448	2	-.998358	1	-.103552	2	.303585	2	.996895
9.0	.200202	2	-.291722	2	-.104634	2	-.108071	2	.313218	2	.997229
9.5	.194607	2	-.301616	2	-.109382	2	-.112552	2	.322508	2	.997512
10.0	.189450	2	-.311152	2	-.114084	2	-.117000	2	.331473	2	.997754

ELECTRON Z = 93, A = 237

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.145898	3	-.309221	1	-.930402		-.192455	1	.669557	1	.593139
1.0	.803665	2	-.539964	1	-.163675	1	-.274044	1	.946077	1	.827435
1.5	.595026	2	-.767687	1	-.234961	1	-.341223	1	.116620	2	.911084
2.0	.491305	2	-.981443	1	-.303614	1	-.402695	1	.136105	2	.946964
2.5	.427653	2	-.118021	2	-.369208	1	-.460932	1	.153985	2	.965071
3.0	.383659	2	-.136545	2	-.432063	1	-.516922	1	.170551	2	.975353
3.5	.350912	2	-.153890	2	-.492590	1	-.571182	1	.186317	2	.981714
4.0	.325294	2	-.170206	2	-.551152	1	-.624035	1	.201127	2	.985910
4.5	.304529	2	-.185617	2	-.608043	1	-.675709	1	.215182	2	.988818
5.0	.287247	2	-.200224	2	-.663499	1	-.726371	1	.228562	2	.990913
5.5	.272567	2	-.214108	2	-.717708	1	-.776151	1	.241331	2	.992473
6.0	.259891	2	-.227339	2	-.770824	1	-.825154	1	.253540	2	.993663
6.5	.248800	2	-.239972	2	-.822973	1	-.873464	1	.265235	2	.994593
7.0	.238988	2	-.252057	2	-.874259	1	-.921152	1	.276453	2	.995333
7.5	.230225	2	-.263634	2	-.924767	1	-.968277	1	.287227	2	.995931
8.0	.222338	2	-.274740	2	-.974573	1	-.101489	2	.297584	2	.996421
8.5	.215189	2	-.285406	2	-.102374	2	-.106103	2	.307550	2	.996828
9.0	.208670	2	-.295659	2	-.107231	2	-.110674	2	.317148	2	.997169
9.5	.202693	2	-.305525	2	-.112035	2	-.115205	2	.326397	2	.997458
10.0	.197187	2	-.315024	2	-.116789	2	-.119698	2	.335316	2	.997705

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.156530	3	-.321690	1	-.979144		-.200367	1	.688844	1	.589026
1.0	.859803	2	-.558711	1	-.171315	1	-.284924	1	.972054	1	.824629
1.5	.634574	2	-.791472	1	-.245029	1	-.354205	1	.119638	2	.909415
2.0	.522443	2	-.100922	2	-.315784	1	-.417381	1	.139424	2	.945908
2.5	.453612	2	-.121116	2	-.383210	1	-.477084	1	.157532	2	.964356
3.0	.406056	2	-.139894	2	-.447681	1	-.534373	1	.174376	2	.974840
3.5	.370687	2	-.157442	2	-.509650	1	-.589803	1	.190182	2	.981330
4.0	.343042	2	-.173921	2	-.569511	1	-.643721	1	.205101	2	.985612
4.5	.320656	2	-.189462	2	-.627580	1	-.696372	1	.219241	2	.988580
5.0	.302043	2	-.204171	2	-.684113	1	-.747934	1	.232684	2	.990720
5.5	.286248	2	-.218135	2	-.739310	1	-.798548	1	.245499	2	.992312
6.0	.272622	2	-.231424	2	-.793338	1	-.848325	1	.257739	2	.993528
6.5	.260710	2	-.244099	2	-.846330	1	-.897356	1	.269450	2	.994477
7.0	.250180	2	-.256211	2	-.898397	1	-.945718	1	.280673	2	.995233
7.5	.240785	2	-.267802	2	-.949633	1	-.993473	1	.291441	2	.995843
8.0	.232335	2	-.278911	2	-.100012	2	-.104067	2	.301784	2	.996344
8.5	.224682	2	-.289569	2	-.104991	2	-.108737	2	.311727	2	.996759
9.0	.217707	2	-.299806	2	-.109908	2	-.113360	2	.321295	2	.997108
9.5	.211318	2	-.309647	2	-.114767	2	-.117939	2	.330508	2	.997403
10.0	.205436	2	-.319115	2	-.119572	2	-.122479	2	.339384	2	.997655

ELECTRON Z = 95, A = 241

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.168062	3	-.334740	1	-.103058	1	-.208615	1	.708792	1	.584955
1.0	.920509	2	-.578241	1	-.179336	1	-.296245	1	.998872	1	.821821
1.5	.677195	2	-.816149	1	-.255553	1	-.367685	1	.122747	2	.907737
2.0	.555892	2	-.103795	2	-.328462	1	-.432597	1	.142834	2	.944845
2.5	.481416	2	-.124307	2	-.397756	1	-.493786	1	.161170	2	.963634
3.0	.429987	2	-.143338	2	-.463866	1	-.552385	1	.178189	2	.974323
3.5	.391766	2	-.161087	2	-.527291	1	-.608990	1	.194131	2	.980942
4.0	.361922	2	-.177725	2	-.588458	1	-.663975	1	.209155	2	.985311
4.5	.337780	2	-.193392	2	-.647709	1	-.717599	1	.223374	2	.988340
5.0	.317728	2	-.208198	2	-.705317	1	-.770056	1	.236876	2	.990524
5.5	.300727	2	-.222235	2	-.761498	1	-.821496	1	.249731	2	.992149
6.0	.286076	2	-.235578	2	-.816430	1	-.872039	1	.261995	2	.993391
6.5	.273280	2	-.248289	2	-.870256	1	-.921782	1	.273718	2	.994360
7.0	.261978	2	-.260422	2	-.923095	1	-.970805	1	.284940	2	.995131
7.5	.251903	2	-.272022	2	-.975046	1	-.101918	2	.295697	2	.995755
8.0	.242848	2	-.283128	2	-.102619	2	-.106696	2	.306020	2	.996266
8.5	.234653	2	-.293773	2	-.107661	2	-.111419	2	.315936	2	.996690
9.0	.227191	2	-.303988	2	-.112636	2	-.116093	2	.325468	2	.997046
9.5	.220360	2	-.313799	2	-.117548	2	-.120720	2	.334640	2	.997348
10.0	.214075	2	-.323230	2	-.122404	2	-.125303	2	.343469	2	.997605

ELECTRON Z = 96, A = 244

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.180443	3	-.348257	1	-.108451	1	-.217121	1	.729107	1	.580925
1.0	.985441	2	-.598338	1	-.187695	1	-.307894	1	.102610	2	.819013
1.5	.722597	2	-.841390	1	-.266466	1	-.381520	1	.125892	2	.906051
2.0	.591387	2	-.106717	2	-.341555	1	-.448174	1	.146272	2	.943775
2.5	.510819	2	-.127538	2	-.412725	1	-.510843	1	.164822	2	.962907
3.0	.455213	2	-.146809	2	-.480473	1	-.570739	1	.182002	2	.973800
3.5	.413926	2	-.164745	2	-.545346	1	-.628501	1	.198066	2	.980550
4.0	.381719	2	-.181528	2	-.607805	1	-.684530	1	.213180	2	.985007
4.5	.355694	2	-.197305	2	-.668219	1	-.739104	1	.227463	2	.988097
5.0	.334100	2	-.212193	2	-.726880	1	-.792431	1	.241007	2	.990326
5.5	.315811	2	-.226288	2	-.784022	1	-.844670	1	.253886	2	.991985
6.0	.300066	2	-.239668	2	-.839833	1	-.895951	1	.266160	2	.993252
6.5	.286327	2	-.252400	2	-.894466	1	-.946376	1	.277878	2	.994242
7.0	.274204	2	-.264539	2	-.948048	1	-.996033	1	.289084	2	.995029
7.5	.263405	2	-.276131	2	-.100069	2	-.104499	2	.299815	2	.995666
8.0	.253708	2	-.287218	2	-.105247	2	-.109332	2	.310103	2	.996188
8.5	.244939	2	-.297835	2	-.110348	2	-.114107	2	.319975	2	.996621
9.0	.236961	2	-.308013	2	-.115377	2	-.118828	2	.329458	2	.996984
9.5	.229661	2	-.317779	2	-.120340	2	-.123499	2	.338574	2	.997292
10.0	.222950	2	-.327159	2	-.125243	2	-.128125	2	.347341	2	.997555

ELECTRON $Z = 97$, $A = 249$

p	F_o		f_1		g_1		f_{-1}		g_{-1}	Sin Δ
.5	.193580	3	-.362097	1	-.114061	1	-.225787	1	.749446	1 .576937
1.0	.105405	3	-.618739	1	-.196331	1	-.319732	1	.105324	2 .816204
1.5	.770338	2	-.866803	1	-.277674	1	-.395535	1	.129010	2 .904357
2.0	.628540	2	-.109637	2	-.354938	1	-.463904	1	.149660	2 .942696
2.5	.541469	2	-.130745	2	-.427965	1	-.528016	1	.168401	2 .962174
3.0	.481411	2	-.150232	2	-.497322	1	-.589167	1	.185717	2 .973273
3.5	.436860	2	-.168329	2	-.563605	1	-.648041	1	.201876	2 .980155
4.0	.402145	2	-.185230	2	-.627315	1	-.705067	1	.217053	2 .984700
4.5	.374123	2	-.201090	2	-.688848	1	-.760543	1	.231373	2 .987853
5.0	.350898	2	-.216032	2	-.748518	1	-.814690	1	.244933	2 .990127
5.5	.331249	2	-.230158	2	-.806573	1	-.867679	1	.257810	2 .991819
6.0	.314350	2	-.243550	2	-.863214	1	-.919647	1	.270066	2 .993112
6.5	.299618	2	-.256276	2	-.918606	1	-.970706	1	.281754	2 .994122
7.0	.286631	2	-.268393	2	-.972884	1	-.102095	2	.292919	2 .994926
7.5	.275074	2	-.279952	2	-.102616	2	-.107045	2	.303598	2 .995576
8.0	.264704	2	-.290994	2	-.107853	2	-.111927	2	.313826	2 .996108
8.5	.255334	2	-.301557	2	-.113008	2	-.116748	2	.323631	2 .996550
9.0	.246815	2	-.311673	2	-.118087	2	-.121512	2	.333039	2 .996921
9.5	.239027	2	-.321370	2	-.123096	2	-.126223	2	.342074	2 .997235
10.0	.231873	2	-.330673	2	-.128042	2	-.130886	2	.350757	2 .997504

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.208664	3	-.377365	1	-.120190	1	-.235319	1	.772153	1	.572989
1.0	.113274	3	-.641348	1	-.205754	1	-.332748	1	.108365	2	.813395
1.5	.825057	2	-.895109	1	-.289891	1	-.410941	1	.132521	2	.902655
2.0	.671101	2	-.112908	2	-.369513	1	-.481195	1	.153496	2	.941611
2.5	.576569	2	-.134357	2	-.444553	1	-.546893	1	.172479	2	.961435
3.0	.511411	2	-.154112	2	-.515652	1	-.609424	1	.189980	2	.972742
3.5	.463124	2	-.172420	2	-.583466	1	-.669522	1	.206281	2	.979756
4.0	.425540	2	-.189487	2	-.648534	1	-.727647	1	.221566	2	.984390
4.5	.395238	2	-.205477	2	-.711283	1	-.784118	1	.235968	2	.987606
5.0	.370151	2	-.220520	2	-.772050	1	-.839172	1	.249589	2	.989925
5.5	.348950	2	-.234721	2	-.831100	1	-.892993	1	.262507	2	.991652
6.0	.330735	2	-.248168	2	-.888649	1	-.945725	1	.274789	2	.992971
6.5	.314872	2	-.260931	2	-.944872	1	-.997489	1	.286490	2	.994002
7.0	.300902	2	-.273071	2	-.999912	1	-.104838	2	.297655	2	.994822
7.5	.288481	2	-.284640	2	-.105389	2	-.109849	2	.308325	2	.995484
8.0	.277346	2	-.295681	2	-.110691	2	-.114788	2	.318535	2	.996028
8.5	.267292	2	-.306233	2	-.115906	2	-.119661	2	.328315	2	.996479
9.0	.258159	2	-.316329	2	-.121040	2	-.124473	2	.337691	2	.996858
9.5	.249815	2	-.325998	2	-.126101	2	-.129230	2	.346688	2	.997178
10.0	.242156	2	-.335268	2	-.131095	2	-.133934	2	.355327	2	.997452

ELECTRON Z = 99, A = 253

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.224392	3	-.392702	1	-.126487	1	-.244836	1	.794241	1	.569082
1.0	.121435	3	-.663781	1	-.215351	1	-.345698	1	.111303	2	.810587
1.5	.881467	2	-.922860	1	-.302242	1	-.426207	1	.135885	2	.900945
2.0	.714725	2	-.116079	2	-.384159	1	-.498257	1	.157141	2	.940518
2.5	.612354	2	-.137824	2	-.461135	1	-.565448	1	.176318	2	.960690
3.0	.541848	2	-.157797	2	-.533893	1	-.629263	1	.193954	2	.972206
3.5	.489653	2	-.176267	2	-.603149	1	-.690488	1	.210348	2	.979353
4.0	.449074	2	-.193451	2	-.669485	1	-.749616	1	.225694	2	.984078
4.5	.416397	2	-.209521	2	-.733360	1	-.806987	1	.240130	2	.987356
5.0	.389375	2	-.224615	2	-.795132	1	-.862854	1	.253762	2	.989722
5.5	.366565	2	-.238843	2	-.855088	1	-.917413	1	.266675	2	.991483
6.0	.346988	2	-.252297	2	-.913455	1	-.970819	1	.278936	2	.992829
6.5	.329958	2	-.265050	2	-.970419	1	-.102320	2	.290602	2	.993880
7.0	.314974	2	-.277165	2	-.102614	2	-.107466	2	.301723	2	.994716
7.5	.301664	2	-.288697	2	-.108073	2	-.112528	2	.312339	2	.995392
8.0	.289742	2	-.299690	2	-.113431	2	-.117515	2	.322486	2	.995947
8.5	.278988	2	-.310185	2	-.118697	2	-.122432	2	.332195	2	.996407
9.0	.269226	2	-.320216	2	-.123879	2	-.127285	2	.341496	2	.996794
9.5	.260315	2	-.329814	2	-.128984	2	-.132079	2	.350411	2	.997121
10.0	.252141	2	-.339006	2	-.134017	2	-.136817	2	.358964	2	.997400

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.242104	3	-.409289	1	-.133281	1	-.255092	1	.818184	1	.565215
1.0	.130608	3	-.688063	1	-.225677	1	-.359639	1	.114492	2	.807779
1.5	.944732	2	-.952936	1	-.315498	1	-.442626	1	.139545	2	.899228
2.0	.763562	2	-.119522	2	-.399847	1	-.516591	1	.161115	2	.939418
2.5	.652358	2	-.141596	2	-.478869	1	-.585370	1	.180516	2	.959939
3.0	.575832	2	-.161820	2	-.553378	1	-.650549	1	.198316	2	.971665
3.5	.519244	2	-.180480	2	-.624153	1	-.712971	1	.214830	2	.978947
4.0	.475304	2	-.197806	2	-.691824	1	-.773163	1	.230261	2	.983762
4.5	.439963	2	-.213983	2	-.756883	1	-.831489	1	.244755	2	.987104
5.0	.410775	2	-.229153	2	-.819714	1	-.888219	1	.258424	2	.989516
5.5	.386165	2	-.243433	2	-.880622	1	-.943562	1	.271354	2	.991312
6.0	.365067	2	-.256917	2	-.939849	1	-.997683	1	.283617	2	.992685
6.5	.346733	2	-.269684	2	-.997595	1	-.105072	2	.295273	2	.993757
7.0	.330618	2	-.281798	2	-.105402	2	-.110278	2	.306372	2	.994610
7.5	.316317	2	-.293316	2	-.110927	2	-.115395	2	.316957	2	.995300
8.0	.303520	2	-.304286	2	-.116345	2	-.120433	2	.327064	2	.995865
8.5	.291985	2	-.314747	2	-.121665	2	-.125397	2	.336727	2	.996335
9.0	.281524	2	-.324737	2	-.126898	2	-.130293	2	.345975	2	.996729
9.5	.271982	2	-.334287	2	-.132048	2	-.135127	2	.354832	2	.997063
10.0	.263235	2	-.343424	2	-.137124	2	-.139903	2	.363322	2	.997348

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.261680	3	-.426880	1	-.140520	1	-.265920	1	.843379	1	.561389
1.0	.140714	3	-.713737	1	-.236631	1	-.374333	1	.117844	2	.804973
1.5	.101421	3	-.984652	1	-.329504	1	-.459898	1	.143387	2	.897503
2.0	.817030	2	-.123146	2	-.416371	1	-.535843	1	.165284	2	.938310
2.5	.696038	2	-.145560	2	-.497501	1	-.606254	1	.184918	2	.959182
3.0	.612853	2	-.166043	2	-.573804	1	-.672829	1	.202888	2	.971120
3.5	.551414	2	-.184899	2	-.646131	1	-.736472	1	.219527	2	.978538
4.0	.503768	2	-.202375	2	-.715160	1	-.797745	1	.235048	2	.983444
4.5	.465497	2	-.218662	2	-.781420	1	-.857039	1	.249605	2	.986850
5.0	.433927	2	-.233912	2	-.845322	1	-.914642	1	.263313	2	.989309
5.5	.407342	2	-.248247	2	-.907190	1	-.970776	1	.276265	2	.991140
6.0	.384576	2	-.261766	2	-.967285	1	-.102562	2	.288534	2	.992539
6.5	.364815	2	-.274550	2	-.102582	2	-.107931	2	.300183	2	.993632
7.0	.347463	2	-.286668	2	-.108296	2	-.113197	2	.311264	2	.994502
7.5	.332079	2	-.298176	2	-.113885	2	-.118370	2	.321821	2	.995206
8.0	.318326	2	-.309125	2	-.119363	2	-.123459	2	.331894	2	.995783
8.5	.305942	2	-.319557	2	-.124738	2	-.128470	2	.341514	2	.996262
9.0	.294718	2	-.329510	2	-.130020	2	-.133410	2	.350713	2	.996663
9.5	.284490	2	-.339016	2	-.135217	2	-.138284	2	.359516	2	.997004
10.0	.275121	2	-.348103	2	-.140334	2	-.143097	2	.367948	2	.997295

ELECTRON Z = 102, A = 256

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.282630	3	-.444944	1	-.148066	1	-.276970	1	.868660	1	.557602
1.0	.151479	3	-.739869	1	-.247966	1	-.389282	1	.121193	2	.802168
1.5	.108783	3	-.101666	2	-.343907	1	-.477410	1	.147204	2	.895772
2.0	.873419	2	-.126775	2	-.433275	1	-.555295	1	.169402	2	.937196
2.5	.741902	2	-.149503	2	-.516475	1	-.627286	1	.189240	2	.958420
3.0	.651569	2	-.170214	2	-.594525	1	-.695200	1	.207351	2	.970571
3.5	.584935	2	-.189237	2	-.668349	1	-.760002	1	.224084	2	.978124
4.0	.533330	2	-.206831	2	-.738679	1	-.822295	1	.239665	2	.983123
4.5	.491933	2	-.223198	2	-.806080	1	-.882494	1	.254254	2	.986594
5.0	.457830	2	-.238498	2	-.870991	1	-.940906	1	.267973	2	.989100
5.5	.429146	2	-.252859	2	-.933758	1	-.997769	1	.280918	2	.990966
6.0	.404614	2	-.266383	2	-.994656	1	-.105327	2	.293165	2	.992392
6.5	.383342	2	-.279155	2	-.105391	2	-.110756	2	.304780	2	.993507
7.0	.364684	2	-.291246	2	-.111171	2	-.116077	2	.315815	2	.994394
7.5	.348159	2	-.302717	2	-.116819	2	-.121299	2	.326318	2	.995111
8.0	.333400	2	-.313618	2	-.122350	2	-.126433	2	.336329	2	.995699
8.5	.320121	2	-.323994	2	-.127774	2	-.131485	2	.345881	2	.996188
9.0	.308098	2	-.333883	2	-.133100	2	-.136463	2	.355006	2	.996597
9.5	.297150	2	-.343319	2	-.138337	2	-.141372	2	.363731	2	.996944
10.0	.287130	2	-.352331	2	-.143491	2	-.146216	2	.372079	2	.997241

POSITRONS

POSITRON Z = 8, A = 18

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.661398	.133044		-.233950 - 2		.128892 - 1		.559506		.993252
1.0	.780127	.478951		-.803516 - 2		.256496 - 1		.115389	1	.998300
1.5	.812514	.903305		-.141971 - 1		.356937 - 1		.168613	1	.999243
2.0	.825190	.135212	1	-.196534 - 1		.437025 - 1		.218652	1	.999574
2.5	.831205	.180898	1	-.240420 - 1		.500610 - 1		.267103	1	.999727
3.0	.834420	.226869	1	-.272462 - 1		.549526 - 1		.314710	1	.999811
3.5	.836275	.272948	1	-.292244 - 1		.584675 - 1		.361836	1	.999861
4.0	.837402	.319070	1	-.299606 - 1		.606531 - 1		.408673	1	.999894
4.5	.838107	.365209	1	-.294477 - 1		.615361 - 1		.455329	1	.999916
5.0	.838556	.411360	1	-.276825 - 1		.611321 - 1		.501871	1	.999932
5.5	.838840	.457520	1	-.246634 - 1		.594506 - 1		.548339	1	.999944
6.0	.839016	.503690	1	-.203891 - 1		.564974 - 1		.594763	1	.999953
6.5	.839119	.549873	1	-.148587 - 1		.522762 - 1		.641161	1	.999960
7.0	.839170	.596072	1	-.807140 - 2		.467892 - 1		.687547	1	.999965
7.5	.839186	.642290	1	-.262035 - 4		.400375 - 1		.733933	1	.999970
8.0	.839175	.688528	1	.927793 - 2		.320215 - 1		.780326	1	.999973
8.5	.839146	.734791	1	.198421 - 1		.227412 - 1		.826733	1	.999976
9.0	.839104	.781079	1	.316677 - 1		.121960 - 1		.873159	1	.999979
9.5	.839052	.827395	1	.447559 - 1		.385310 - 3		.919608	1	.999981
10.0	.838993	.873743	1	.591083 - 1		-.126921 - 1		.966084	1	.999983

POSITRON $Z = 9$, $A = 19$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.627772	.129849		-.264905	- 2	.141444	- 1	.545004		.991483
1.0	.757410	.472142		-.924374	- 2	.285680	- 1	.113681	1	.997850
1.5	.793066	.892627		-.165128	- 1	.400603	- 1	.166567	1	.999043
2.0	.807011	.133735	1	-.231304	- 1	.493995	- 1	.216218	1	.999461
2.5	.813603	.178996	1	-.286894	- 1	.570242	- 1	.264255	1	.999655
3.0	.817103	.224533	1	-.330596	- 1	.631427	- 1	.311434	1	.999760
3.5	.819106	.270172	1	-.361953	- 1	.678578	- 1	.358124	1	.999824
4.0	.820307	.315850	1	-.380789	- 1	.712234	- 1	.404521	1	.999865
4.5	.821047	.361544	1	-.387031	- 1	.732700	- 1	.450734	1	.999894
5.0	.821506	.407247	1	-.380647	- 1	.740152	- 1	.496831	1	.999914
5.5	.821786	.452959	1	-.361620	- 1	.734702	- 1	.542855	1	.999929
6.0	.821949	.498681	1	-.329939	- 1	.716416	- 1	.588834	1	.999940
6.5	.822033	.544417	1	-.285598	- 1	.685337	- 1	.634788	1	.999949
7.0	.822063	.590170	1	-.228586	- 1	.641491	- 1	.680731	1	.999956
7.5	.822054	.635942	1	-.158896	- 1	.584893	- 1	.726675	1	.999962
8.0	.822018	.681736	1	-.765178	- 2	.515548	- 1	.772628	1	.999966
8.5	.821964	.727556	1	.185608	- 2	.433457	- 1	.818596	1	.999970
9.0	.821896	.773404	1	.126352	- 1	.338617	- 1	.864586	1	.999973
9.5	.821818	.819281	1	.246869	- 1	.231019	- 1	.910601	1	.999976
10.0	.821733	.865191	1	.380128	- 1	.110654	- 1	.956645	1	.999978

POSITRON Z = 10, A = 21

p	F_o	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.595737	.126745		-.293082 - 2	.153217 - 1	.530817		.989516
1.0	.735525	.465512		-.103683 - 1	.313779 - 1	.112010	1	.997348
1.5	.774305	.882230		-.186652 - 1	.442641 - 1	.164568	1	.998819
2.0	.789460	.132297	1	-.263434 - 1	.548560 - 1	.213843	1	.999335
2.5	.796596	.177144	1	-.329512 - 1	.636470 - 1	.261478	1	.999574
3.0	.800361	.222258	1	-.383454 - 1	.708718 - 1	.308241	1	.999704
3.5	.802495	.267468	1	-.424761 - 1	.766458 - 1	.354508	1	.999783
4.0	.803759	.312714	1	-.453247 - 1	.810299 - 1	.400476	1	.999834
4.5	.804523	.357974	1	-.468834 - 1	.840581 - 1	.446260	1	.999869
5.0	.804984	.403242	1	-.471491 - 1	.857507 - 1	.491926	1	.999894
5.5	.805253	.448519	1	-.461202 - 1	.861201 - 1	.537520	1	.999912
6.0	.805397	.493808	1	-.437957 - 1	.851740 - 1	.583069	1	.999926
6.5	.805457	.539111	1	-.401750 - 1	.829171 - 1	.628595	1	.999937
7.0	.805459	.584432	1	-.352571 - 1	.793526 - 1	.674113	1	.999946
7.5	.805422	.629775	1	-.290412 - 1	.744820 - 1	.719633	1	.999953
8.0	.805357	.675143	1	-.215263 - 1	.683062 - 1	.765165	1	.999958
8.5	.805273	.720538	1	-.127111 - 1	.608252 - 1	.810715	1	.999963
9.0	.805175	.765965	1	-.259440 - 2	.520387 - 1	.856290	1	.999967
9.5	.805068	.811424	1	.882534 - 2	.419459 - 1	.901893	1	.999970
10.0	.804955	.856918	1	.215498 - 1	.305457 - 1	.947529	1	.999973

POSITRON Z = 11, A = 23

p	F_o	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.565261	.123731		-.319964 - 2	.164274 - 1	.516952		.987356
1.0	.714482	.459064		-.114685 - 1	.341066 - 1	.110377	1	.996794
1.5	.756248	.872120		-.207841 - 1	.483774 - 1	.162618	1	.998571
2.0	.772560	.130897	1	-.295154 - 1	.602125 - 1	.211526	1	.999195
2.5	.780210	.175341	1	-.371668 - 1	.701622 - 1	.258769	1	.999485
3.0	.784220	.220042	1	-.435822 - 1	.784876 - 1	.305126	1	.999642
3.5	.786472	.264834	1	-.487080 - 1	.853175 - 1	.350978	1	.999737
4.0	.787787	.309656	1	-.525243 - 1	.907197 - 1	.396528	1	.999799
4.5	.788566	.354491	1	-.550234 - 1	.947324 - 1	.441890	1	.999841
5.0	.789021	.399334	1	-.562020 - 1	.973782 - 1	.487135	1	.999871
5.5	.789272	.444185	1	-.560588 - 1	.986710 - 1	.532307	1	.999894
6.0	.789391	.489049	1	-.545930 - 1	.986193 - 1	.577435	1	.999911
6.5	.789421	.533928	1	-.518039 - 1	.972288 - 1	.622542	1	.999924
7.0	.789392	.578826	1	-.476907 - 1	.945028 - 1	.667642	1	.999934
7.5	.789322	.623748	1	-.422526 - 1	.904433 - 1	.712747	1	.999943
8.0	.789224	.668697	1	-.354885 - 1	.850511 - 1	.757865	1	.999950
8.5	.789106	.713677	1	-.273973 - 1	.783266 - 1	.803005	1	.999955
9.0	.788975	.758689	1	-.179775 - 1	.702692 - 1	.848172	1	.999960
9.5	.788836	.803738	1	-.722754 - 2	.608783 - 1	.893371	1	.999964
10.0	.788691	.848825	1	.485430 - 2	.501526 - 1	.938606	1	.999968

POSITRON Z = 12, A = 25

p	F_o	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.536276	.120804		-.345584 - 2	.174641 - 1	.503401		.985007
1.0	.694243	.452793		-.125445 - 1	.367568 - 1	.108781	1	.996188
1.5	.738866	.862290		-.228690 - 1	.524026 - 1	.160715	1	.998300
2.0	.756283	.129536	1	-.326451 - 1	.654712 - 1	.209267	1	.999043
2.5	.764419	.173587	1	-.413334 - 1	.765706 - 1	.256127	1	.999387
3.0	.768655	.217885	1	-.487653 - 1	.859895 - 1	.302086	1	.999574
3.5	.771011	.262266	1	-.548837 - 1	.938702 - 1	.347533	1	.999687
4.0	.772367	.306675	1	-.596677 - 1	.100288	.392673	1	.999760
4.5	.773153	.351094	1	-.631096 - 1	.105285	.437623	1	.999811
5.0	.773595	.395520	1	-.652062 - 1	.108886	.482455	1	.999847
5.5	.773822	.439954	1	-.659563 - 1	.111107	.527213	1	.999873
6.0	.773910	.484400	1	-.653594 - 1	.111958	.571928	1	.999894
6.5	.773906	.528863	1	-.634149 - 1	.111444	.616623	1	.999909
7.0	.773840	.573347	1	-.601222 - 1	.109570	.661313	1	.999922
7.5	.773733	.617856	1	-.554804 - 1	.106338	.706010	1	.999932
8.0	.773598	.662395	1	-.494885 - 1	.101748	.750724	1	.999940
8.5	.773443	.706965	1	-.421454 - 1	.958016 - 1	.795461	1	.999947
9.0	.773276	.751572	1	-.334494 - 1	.884979 - 1	.840228	1	.999953
9.5	.773101	.796217	1	-.233991 - 1	.798363 - 1	.885030	1	.999958
10.0	.772921	.840904	1	-.119925 - 1	.698153 - 1	.929872	1	.999962

POSITRON Z = 13, A = 27

p	F_o	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.508712	.117961		-.369980 - 2	.184342 - 1	.490161		.982472
1.0	.674772	.446692		-.135966 - 1	.393309 - 1	.107221	1	.995530
1.5	.722130	.852730		-.249200 - 1	.563422 - 1	.158857	1	.998006
2.0	.740604	.128212	1	-.357320 - 1	.706342 - 1	.207062	1	.998877
2.5	.749199	.171879	1	-.454494 - 1	.828738 - 1	.253549	1	.999281
3.0	.753644	.215783	1	-.538918 - 1	.933780 - 1	.299120	1	.999500
3.5	.756091	.259764	1	-.609985 - 1	.102303	.344171	1	.999633
4.0	.757478	.303768	1	-.667480 - 1	.109732	.388909	1	.999719
4.5	.758262	.347780	1	-.711324 - 1	.115711	.433455	1	.999778
5.0	.758684	.391797	1	-.741490 - 1	.120268	.477881	1	.999820
5.5	.758880	.435822	1	-.757969 - 1	.123419	.522234	1	.999851
6.0	.758932	.479860	1	-.760755 - 1	.125176	.566545	1	.999875
6.5	.758890	.523915	1	-.749846 - 1	.125546	.610836	1	.999894
7.0	.758784	.567992	1	-.725237 - 1	.124533	.655124	1	.999908
7.5	.758636	.612096	1	-.686920 - 1	.122139	.699420	1	.999920
8.0	.758460	.656231	1	-.634885 - 1	.118366	.743736	1	.999930
8.5	.758265	.700401	1	-.569120 - 1	.113214	.788077	1	.999938
9.0	.758059	.744609	1	-.489610 - 1	.106683	.832452	1	.999944
9.5	.757845	.788858	1	-.396337 - 1	.987723 - 1	.876864	1	.999950
10.0	.757628	.833152	1	-.289284 - 1	.894801 - 1	.921319	1	.999955

POSITRON $Z = 14$, $A = 28$

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.482566	.115206		-.394119 - 2		.193432 - 1		.477248		.979756
1.0	.656116	.440779		-.146658 - 1		.418494 - 1		.105699	1	.994822
1.5	.706099	.843471		-.270268 - 1		.602482 - 1		.157049	1	.997688
2.0	.725586	.126929	1	-.389304 - 1		.758008 - 1		.204918	1	.998698
2.5	.734616	.170222	1	-.497498 - 1		.892344 - 1		.251040	1	.999166
3.0	.739255	.213741	1	-.592926 - 1		.100895		.296231	1	.999421
3.5	.741781	.257330	1	-.674951 - 1		.110953		.340891	1	.999574
4.0	.743189	.300937	1	-.743351 - 1		.119499		.385234	1	.999674
4.5	.743963	.344549	1	-.798049 - 1		.126583		.429381	1	.999742
5.0	.744359	.388163	1	-.839023 - 1		.132237		.473405	1	.999791
5.5	.744520	.431784	1	-.866265 - 1		.136479		.517355	1	.999828
6.0	.744531	.475416	1	-.879777 - 1		.139322		.561262	1	.999855
6.5	.744445	.519066	1	-.879556 - 1		.140771		.605150	1	.999876
7.0	.744294	.562739	1	-.865600 - 1		.140834		.649035	1	.999894
7.5	.744102	.606438	1	-.837903 - 1		.139512		.692930	1	.999907
8.0	.743882	.650170	1	-.796456 - 1		.136808		.736845	1	.999918
8.5	.743644	.693937	1	-.741249 - 1		.132721		.780787	1	.999928
9.0	.743396	.737744	1	-.672266 - 1		.127252		.824764	1	.999936
9.5	.743141	.781594	1	-.589492 - 1		.120400		.868780	1	.999942
10.0	.742884	.825490	1	-.492907 - 1		.112164		.912841	1	.999948

POSITRON Z = 15, A = 31

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.457598	.112517		-.415258	- 2	.201846	- 1	.464593		.976864
1.0	.638002	.434984		-.156315	- 1	.442605	- 1	.104203	1	.994062
1.5	.690486	.834394		-.289225	- 1	.639756	- 1	.155274	1	.997348
2.0	.710940	.125671	1	-.417777	- 1	.806837	- 1	.202813	1	.998506
2.5	.720380	.168599	1	-.535278	- 1	.951737	- 1	.248580	1	.999043
3.0	.725194	.211742	1	-.639690	- 1	.107821		.293401	1	.999335
3.5	.727787	.254948	1	-.730346	- 1	.113812		.337684	1	.999511
4.0	.729208	.298168	1	-.807019	- 1	.128244		.381644	1	.999626
4.5	.729965	.341391	1	-.869637	- 1	.136173		.425406	1	.999704
5.0	.730328	.384615	1	-.918179	- 1	.142632		.469044	1	.999760
5.5	.730448	.427846	1	-.952641	- 1	.147642		.512609	1	.999802
6.0	.730413	.471090	1	-.973028	- 1	.151216		.556133	1	.999834
6.5	.730279	.514352	1	-.979338	- 1	.153362		.599639	1	.999858
7.0	.730081	.557639	1	-.971572	- 1	.154086		.643144	1	.999878
7.5	.729841	.600955	1	-.949724	- 1	.153391		.686662	1	.999894
8.0	.729573	.644305	1	-.913785	- 1	.151279		.730203	1	.999906
8.5	.729290	.687695	1	-.863744	- 1	.147750		.773774	1	.999917
9.0	.728997	.731127	1	-.799585	- 1	.142804		.817384	1	.999926
9.5	.728699	.774606	1	-.721291	- 1	.136441		.861038	1	.999934
10.0	.728400	.818135	1	-.628841	- 1	.128659		.904741	1	.999940

POSITRON Z = 16, A = 33

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.433927	.109911	-.436222 - 2	.209698 - 1	.452255	.973800
1.0	.620640	.429367	-.166154 - 1	.466208 - 1	.102744 1	.993252
1.5	.675528	.825603	-.308753 - 1	.676747 - 1	.153545 1	.996984
2.0	.696910	.124452 1	-.447377 - 1	.855759 - 1	.200766 1	.998300
2.5	.706738	.167024 1	-.574906 - 1	.101176	.246186 1	.998911
3.0	.711714	.209800 1	-.689188 - 1	.114880	.290645 1	.999243
3.5	.714364	.252631 1	-.789532 - 1	.126890	.334555 1	.999444
4.0	.715788	.295472 1	-.875707 - 1	.137313	.378138 1	.999574
4.5	.716522	.338312 1	-.947645 - 1	.146208	.421519 1	.999664
5.0	.716846	.381151 1	-.100533	.153612	.464776 1	.999727
5.5	.716920	.423997 1	-.104876	.159546	.507957 1	.999775
6.0	.716835	.466855 1	-.107795	.164027	.551098 1	.999811
6.5	.716650	.509732 1	-.109290	.167061	.594222 1	.999839
7.0	.716400	.552634 1	-.109361	.168657	.637347 1	.999861
7.5	.716108	.595567 1	-.108007	.168817	.680486 1	.999879
8.0	.715791	.638536 1	-.105229	.167543	.723650 1	.999894
8.5	.715459	.681546 1	-.101024	.164836	.766847 1	.999906
9.0	.715119	.724601 1	-.953915 - 1	.160697	.810085 1	.999916
9.5	.714775	.767705 1	-.883294 - 1	.155124	.853369 1	.999924
10.0	.714432	.810862 1	-.798357 - 1	.148116	.896706 1	.999932

POSITRON Z = 17, A = 35

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.411437	.107378	-.456126 - 2	.216980 - 1	.440209	.970571
1.0	.603922	.423901	-.175780 - 1	.489144 - 1	.101318 1	.992392
1.5	.661115	.817054	-.327971 - 1	.712991 - 1	.151858 1	.996597
2.0	.683386	.123267 1	-.476571 - 1	.903834 - 1	.198768 1	.998082
2.5	.693582	.165491 1	-.614033 - 1	.107083	.243850 1	.998771
3.0	.698706	.207908 1	-.738099 - 1	.121834	.287954 1	.999146
3.5	.701402	.250373 1	-.848051 - 1	.134855	.331500 1	.999372
4.0	.702822	.292842 1	-.943659 - 1	.146259	.374714 1	.999519
4.5	.703525	.335307 1	-.102486	.156113	.417722 1	.999620
5.0	.703806	.377770 1	-.109164	.164455	.460603 1	.999692
5.5	.703823	.420237 1	-.114401	.171310	.503409 1	.999746
6.0	.703690	.462717 1	-.118199	.176693	.546174 1	.999786
6.5	.703449	.505216 1	-.120557	.180615	.588923 1	.999818
7.0	.703144	.547740 1	-.121476	.183082	.631674 1	.999843
7.5	.702799	.590297 1	-.120956	.184098	.674441 1	.999863
8.0	.702429	.632892 1	-.118997	.183665	.717234 1	.999880
8.5	.702045	.675529 1	-.115597	.181785	.760063 1	.999894
9.0	.701655	.718213 1	-.110754	.178457	.802936 1	.999905
9.5	.701263	.760949 1	-.104468	.173682	.845857 1	.999915
10.0	.700874	.803739 1	-.967357 - 1	.167457	.888834 1	.999923

POSITRON   Z = 18, A = 38

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.390015	.104909	-.474289 - 2	.223686 - 1	.428425	.967180
1.0	.587731	.418557	-.184874 - 1	.511280 - 1	.999164	.991483
1.5	.647124	.808694	-.346164 - 1	.748100 - 1	.150202 1	.996188
2.0	.670246	.122108 1	-.504115 - 1	.950293 - 1	.196810 1	.997850
2.5	.680787	.163991 1	-.650761 - 1	.112766	.241561 1	.998622
3.0	.686046	.206057 1	-.783736 - 1	.128491	.285319 1	.999043
3.5	.688778	.248164 1	-.902303 - 1	.142435	.328511 1	.999296
4.0	.690186	.290270 1	-.100623	.154723	.371363 1	.999461
4.5	.690852	.332368 1	-.109547	.165425	.414008 1	.999574
5.0	.691084	.374463 1	-.117000	.174584	.456526 1	.999655
5.5	.691051	.416563 1	-.122985	.182225	.498967 1	.999715
6.0	.690854	.458675 1	-.127503	.188366	.541369 1	.999760
6.5	.690555	.500806 1	-.130554	.193017	.583756 1	.999796
7.0	.690192	.542966 1	-.132141	.196186	.626147 1	.999824
7.5	.689789	.585160 1	-.132261	.197877	.668556 1	.999847
8.0	.689364	.627393 1	-.130916	.198094	.710995 1	.999865
8.5	.688927	.669672 1	-.128104	.196836	.753472 1	.999881
9.0	.688485	.712001 1	-.123823	.194104	.795997 1	.999894
9.5	.688043	.754385 1	-.118072	.189898	.838574 1	.999904
10.0	.687606	.796827 1	-.110848	.184216	.881211 1	.999914

POSITRON Z = 19, A = 39

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.369788	.102524		-.492914	- 2	.229927	- 1	.416974		.963634
1.0	.572310	.413409		-.194420	- 1	.533109	- 1	.985566		.990524
1.5	.633835	.800660		-.365515	- 1	.783341	- 1	.148601	1	.995755
2.0	.657781	.120993	1	-.533783	- 1	.997563	- 1	.194916	1	.997605
2.5	.568652	.162548	1	-.690831	- 1	.118624		.239346	1	.998466
3.0	.674034	.204272	1	-.834193	- 1	.135439		.282764	1	.998934
3.5	.676793	.246027	1	-.963109	- 1	.150452		.325606	1	.999216
4.0	.678183	.287777	1	-.107736		.163794		.368101	1	.999400
4.5	.678807	.329514	1	-.117688		.175542		.410385	1	.999526
5.0	.678984	.371244	1	-.126169		.185740		.452537	1	.999616
5.5	.678891	.412977	1	-.133180		.194417		.494613	1	.999682
6.0	.678633	.454721	1	-.138724		.201593		.536647	1	.999733
6.5	.678271	.496484	1	-.142802		.207278		.578666	1	.999773
7.0	.677847	.538274	1	-.145415		.211480		.620689	1	.999804
7.5	.677385	.580099	1	-.146563		.214206		.662730	1	.999829
8.0	.676902	.621964	1	-.146247		.215457		.704802	1	.999850
8.5	.676408	.663875	1	-.144465		.215235		.746914	1	.999867
9.0	.675913	.705837	1	-.141215		.213541		.789074	1	.999881
9.5	.675419	.747855	1	-.136497		.210374		.831288	1	.999894
10.0	.674931	.789933	1	-.130308		.205733		.873563	1	.999904

POSITRON Z = 20, A = 42

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.350466	.100190	-.509222 - 2	.235606 - 1	.405748	.959939
1.0	.557270	.408344	-.203147 - 1	.554028 - 1	.972149	.989516
1.5	.620821	.792749	-.383192 - 1	.817106 - 1	.147021 1	.995300
2.0	.645551	.119895 1	-.560666 - 1	.104253	.193050 1	.997348
2.5	.656731	.161126 1	-.726761 - 1	.124142	.237165 1	.998300
3.0	.662223	.202514 1	-.878912 - 1	.141915	.280252 1	.998819
3.5	.665001	.243927 1	-.101634	.157838	.322753 1	.999132
4.0	.666364	.285327 1	-.113883	.172053	.364902 1	.999335
4.5	.666940	.326713 1	-.124634	.184640	.406836 1	.999474
5.0	.667058	.368090 1	-.133888	.195649	.448638 1	.999574
5.5	.666901	.409468 1	-.141647	.205111	.490362 1	.999648
6.0	.666577	.450857 1	-.147916	.213044	.532046 1	.999704
6.5	.666151	.492267 1	-.152694	.219463	.573715 1	.999748
7.0	.665663	.533705 1	-.155984	.224375	.615391 1	.999783
7.5	.665138	.575179 1	-.157787	.227787	.657087 1	.999811
8.0	.664595	.616695 1	-.158102	.229701	.698817 1	.999834
8.5	.664044	.658260 1	-.156928	.230119	.740589 1	.999853
9.0	.663492	.699880 1	-.154264	.229041	.782413 1	.999869
9.5	.662945	.741558 1	-.150108	.226468	.824295 1	.999882
10.0	.662405	.783300 1	-.144459	.222398	.866242 1	.999894

POSITRON $Z = 21$, $A = 45$

p	F_o	f_1		g_1		f_{-1}	g_{-1}		Sin Δ
.5	.332124	.979215	- 1	-.524695	- 2	.240803 - 1	.394795		.956099
1.0	.542771	.403413		-.211716	- 1	.574372 - 1	.959016		.988460
1.5	.608267	.785053		-.400656	- 1	.850251 - 1	.145478	1	.994822
2.0	.633750	.118827	1	-.587290	- 1	.108681	.191228	1	.997077
2.5	.645223	.159742	1	-.762394	- 1	.129587	.235035	1	.998126
3.0	.650812	.200802	1	-.923306	- 1	.148313	.277798	1	.998698
3.5	.653600	.241878	1	-.106924		.165143	.319965	1	.999043
4.0	.654930	.282937	1	-.119998		.180228	.361775	1	.999267
4.5	.655452	.323977	1	-.131549		.193656	.403366	1	.999421
5.0	.655507	.365007	1	-.141579		.205478	.444823	1	.999531
5.5	.655283	.406038	1	-.150093		.215727	.486202	1	.999612
6.0	.654891	.447079	1	-.157093		.224424	.527541	1	.999674
6.5	.654396	.488141	1	-.162582		.231584	.568868	1	.999722
7.0	.653841	.529233	1	-.166562		.237216	.610201	1	.999760
7.5	.653252	.570362	1	-.169033		.241326	.651559	1	.999791
8.0	.652647	.611536	1	-.169995		.243917	.692951	1	.999817
8.5	.652036	.652761	1	-.169447		.244992	.734390	1	.999838
9.0	.651426	.694043	1	-.167389		.244550	.775883	1	.999855
9.5	.650824	.735387	1	-.163819		.242592	.817439	1	.999870
10.0	.650231	.776799	1	-.158734		.239116	.859062	1	.999883

POSITRON Z = 22, A = 47

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.314774	.957228	− 1	−.539942	− 2	.245571	− 1	.384139		.952121
1.0	.528887	.398644		−.220402	− 1	.594306	− 1	.946225		.987356
1.5	.596263	.777623		−.418519	− 1	.883160	− 1	.143978	1	.994321
2.0	.622476	.117795	1	−.614707	− 1	.113113		.189459	1	.996794
2.5	.634226	.158403	1	−.799323	− 1	.135072		.232967	1	.997944
3.0	.639904	.199144	1	−.969614	− 1	.154799		.275413	1	.998571
3.5	.642694	.239891	1	−.112478		.172596		.317252	1	.998950
4.0	.643985	.280615	1	−.126461		.188623		.358727	1	.999195
4.5	.644449	.321316	1	−.138909		.202974		.399979	1	.999364
5.0	.644436	.362004	1	−.149825		.215703		.441095	1	.999485
5.5	.644141	.402691	1	−.159214		.226847		.482132	1	.999574
6.0	.643676	.443387	1	−.167079		.236428		.523127	1	.999642
6.5	.643111	.484104	1	−.173424		.244462		.564110	1	.999695
7.0	.642487	.524851	1	−.178250		.250958		.605102	1	.999737
7.5	.641831	.565636	1	−.181560		.255923		.646118	1	.999771
8.0	.641161	.606467	1	−.183352		.259361		.687171	1	.999799
8.5	.640488	.647350	1	−.183628		.261275		.728272	1	.999822
9.0	.639819	.688292	1	−.182384		.261664		.769429	1	.999841
9.5	.639159	.729298	1	−.179621		.260530		.810651	1	.999857
10.0	.638512	.770374	1	−.175335		.257870		.851944	1	.999871

POSITRON Z = 23, A = 49

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.298313	.935848	− 1	−.554355	− 2	.249899	− 1	.373747		.948011
1.0	.515503	.394003		−.228916	− 1	.613700	− 1	.933710		.986205
1.5	.584688	.770402		−.436133	− 1	.915470	− 1	.142514	1	.993798
2.0	.611603	.116793	1	−.641790	− 1	.117477		.187733	1	.996497
2.5	.623617	.157102	1	−.835829	− 1	.140480		.230949	1	.997754
3.0	.629373	.197530	1	−.101540		.161198		.273085	1	.998439
3.5	.632158	.237956	1	−.117971		.179951		.314603	1	.998852
4.0	.633405	.278352	1	−.132854		.196910		.355750	1	.999121
4.5	.633805	.318720	1	−.146190		.212174		.396670	1	.999305
5.0	.633721	.359072	1	−.157984		.225803		.437451	1	.999437
5.5	.633350	.399421	1	−.168239		.237833		.478151	1	.999535
6.0	.632811	.439779	1	−.176962		.248290		.518809	1	.999609
6.5	.632172	.480157	1	−.184157		.257190		.559455	1	.999667
7.0	.631476	.520564	1	−.189825		.264544		.600110	1	.999713
7.5	.630751	.561011	1	−.193968		.270358		.640790	1	.999750
8.0	.630015	.601505	1	−.196586		.274639		.681509	1	.999780
8.5	.629278	.642052	1	−.197680		.277387		.722278	1	.999805
9.0	.628548	.682660	1	−.197249		.278604		.763106	1	.999826
9.5	.627829	.723334	1	−.195291		.278291		.804000	1	.999844
10.0	.627125	.764080	1	−.191803		.276445		.844968	1	.999859

POSITRON $Z = 24$, $A = 52$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.282642	.914975	-1	$-.567431$	-2	.253775	-1	.363587		.943775
1.0	.502499	.389453		$-.237010$	-1	.632427	-1	.921394		.985007
1.5	.573411	.763323		$-.452935$	-1	.946853	-1	.141074	1	.993252
2.0	.600999	.115809	1	$-.667562$	-1	.121710		.186037	1	.996188
2.5	.613259	.155825	1	$-.870420$	-1	.145708		.228967	1	.997555
3.0	.619083	.195947	1	$-.105858$		.167357		.270800	1	.998300
3.5	.621855	.236057	1	$-.123122$		.186997		.312004	1	.998750
4.0	.623051	.276132	1	$-.138817$		.204810		.352831	1	.999043
4.5	.623384	.316175	1	$-.152943$		.220899		.393427	1	.999243
5.0	.623223	.356199	1	$-.165505$		.235328		.433881	1	.999387
5.5	.622775	.396218	1	$-.176511$		.248139		.474254	1	.999493
6.0	.622157	.436246	1	$-.185966$		.259355		.514586	1	.999574
6.5	.621442	.476295	1	$-.193874$		.268996		.554906	1	.999637
7.0	.620673	.516374	1	$-.200239$		.277073		.595237	1	.999687
7.5	.619877	.556494	1	$-.205061$		.283594		.635595	1	.999727
8.0	.619072	.596663	1	$-.208343$		.288563		.675994	1	.999760
8.5	.618270	.636887	1	$-.210083$		.291984		.716446	1	.999788
9.0	.617477	.677175	1	$-.210282$		.293858		.756959	1	.999811
9.5	.616699	.717531	1	$-.208937$		.294185		.797543	1	.999830
10.0	.615938	.757963	1	$-.206047$		.292963		.838204	1	.999847

POSITRON $Z = 25$, $A = 53$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.267890	.894838	− 1	−.580822	− 2	.257315	− 1	.353742		.939418
1.0	.490158	.385093		−.245462	− 1	.650943	− 1	.909481		.983762
1.5	.562761	.756566		−.470662	− 1	.978395	− 1	.139688	1	.992685
2.0	.591009	.114871	1	−.695018	− 1	.126013		.184406	1	.995865
2.5	.603507	.154604	1	−.907641	− 1	.151077		.227059	1	.997348
3.0	.609392	.194430	1	−.110551		.173748		.268596	1	.998156
3.5	.612146	.234233	1	−.128782		.194385		.309492	1	.998644
4.0	.613287	.273993	1	−.145439		.213179		.350003	1	.998961
4.5	.613547	.313715	1	−.160525		.230241		.390276	1	.999179
5.0	.613307	.353416	1	−.174047		.245639		.430405	1	.999335
5.5	.612777	.393108	1	−.186013		.259416		.470450	1	.999450
6.0	.612078	.432806	1	−.196430		.271600		.510452	1	.999538
6.5	.611284	.472524	1	−.205302		.282210		.550441	1	.999606
7.0	.610438	.512272	1	−.212633		.291258		.590440	1	.999661
7.5	.609569	.552060	1	−.218426		.298753		.630466	1	.999704
8.0	.608694	.591896	1	−.222682		.304700		.670535	1	.999740
8.5	.607825	.631789	1	−.225401		.309104		.710656	1	.999770
9.0	.606958	.671745	1	−.226583		.311964		.750840	1	.999795
9.5	.606128	.711772	1	−.226225		.313283		.791096	1	.999816
10.0	.605307	.751874	1	−.224328		.313058		.831430	1	.999834

POSITRON $Z = 26$, $A = 56$

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.253795	.875086	− 1	−.592440	− 2	.260408	− 1	.344089		.934946
1.0	.478056	.380783		−.253264	− 1	.668681	− 1	.897678		.982472
1.5	.552260	.749876		−.487053	− 1	.100871		.138313	1	.992095
2.0	.581133	.113942	1	−.720251	− 1	.130126		.182790	1	.995530
2.5	.593852	.153396	1	−.941555	− 1	.156171		.225171	1	.997132
3.0	.599787	.192928	1	−.114787		.179757		.266418	1	.998006
3.5	.602514	.232429	1	−.133838		.201265		.307013	1	.998534
4.0	.603594	.271880	1	−.151294		.220897		.347215	1	.998877
4.5	.603777	.311290	1	−.167157		.238771		.387177	1	.999112
5.0	.603454	.350675	1	−.181438		.254958		.426991	1	.999281
5.5	.602840	.390050	1	−.194145		.269503		.466721	1	.999405
6.0	.602058	.429430	1	−.205286		.282437		.506407	1	.999500
6.5	.601183	.468830	1	−.214866		.293780		.546081	1	.999574
7.0	.600259	.508261	1	−.222889		.303545		.585767	1	.999633
7.5	.599315	.547733	1	−.229359		.311742		.625482	1	.999680
8.0	.598368	.587255	1	−.234277		.318377		.665241	1	.999719
8.5	.597430	.626836	1	−.237644		.323453		.705056	1	.999751
9.0	.596508	.666483	1	−.239459		.326972		.744937	1	.999778
9.5	.595605	.706202	1	−.239721		.328934		.784893	1	.999801
10.0	.594725	.746001	1	−.238428		.329339		.824931	1	.999820

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.240540	.856043	− 1	−.604367	− 2	.263205	− 1	.334744		.930367
1.0	.466588	.376661		−.261412	− 1	.686247	− 1	.886278		.981136
1.5	.542369	.743510		−.504337	− 1	.103921		.136993	1	.991483
2.0	.571860	.113058	1	−.747100	− 1	.134311		.181240	1	.995182
2.5	.584793	.152244	1	−.977981	− 1	.161404		.223358	1	.996909
3.0	.590772	.191494	1	−.119381		.185991		.264322	1	.997850
3.5	.593468	.230701	1	−.139376		.208472		.304622	1	.998419
4.0	.594482	.269851	1	−.157771		.229062		.344520	1	.998789
4.5	.594584	.308953	1	−.174572		.247885		.384172	1	.999043
5.0	.594175	.348025	1	−.189789		.265017		.423673	1	.999224
5.5	.593473	.387085	1	−.203433		.280505		.463086	1	.999359
6.0	.592605	.426148	1	−.215512		.294382		.502454	1	.999461
6.5	.591646	.465229	1	−.226032		.306670		.541808	1	.999541
7.0	.590641	.504340	1	−.235000		.317383		.581174	1	.999604
7.5	.589620	.543491	1	−.242418		.326531		.620569	1	.999655
8.0	.588600	.582692	1	−.248288		.334121		.660008	1	.999697
8.5	.587592	.621952	1	−.252612		.340158		.699503	1	.999731
9.0	.586602	.661279	1	−.255388		.344642		.739065	1	.999760
9.5	.585636	.700680	1	−.256617		.347576		.778703	1	.999785
10.0	.584694	.740160	1	−.256297		.348958		.818426	1	.999806

POSITRON $Z = 28$, $A = 60$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.227872	.837346	- 1	-.614650	- 2	.265588	- 1	.325581		.925685
1.0	.455318	.372578		-.268947	- 1	.703066	- 1	.874966		.979756
1.5	.532587	.737192		-.520358	- 1	.106854		.135681	1	.990849
2.0	.562663	.112180	1	-.771846	- 1	.138315		.179700	1	.994822
2.5	.575795	.151101	1	-.101128		.166374		.221560	1	.996676
3.0	.581807	.190071	1	-.123542		.191862		.262246	1	.997688
3.5	.584465	.228989	1	-.144344		.215199		.302256	1	.998300
4.0	.585408	.267842	1	-.163524		.236612		.341859	1	.998698
4.5	.585425	.306643	1	-.181090		.256232		.381210	1	.998971
5.0	.584925	.345411	1	-.197055		.274139		.420408	1	.999166
5.5	.584133	.384165	1	-.211429		.290384		.459516	1	.999311
6.0	.583176	.422922	1	-.224223		.305001		.498580	1	.999421
6.5	.582132	.461696	1	-.235444		.318013		.537631	1	.999506
7.0	.581046	.500500	1	-.245097		.329436		.576694	1	.999574
7.5	.579947	.539346	1	-.253188		.339280		.615788	1	.999629
8.0	.578852	.578244	1	-.259717		.347553		.654928	1	.999674
8.5	.577772	.617203	1	-.264687		.354259		.694127	1	.999711
9.0	.576714	.656230	1	-.268098		.359401		.733396	1	.999742
9.5	.575683	.695335	1	-.269948		.362980		.772745	1	.999769
10.0	.574679	.734522	1	-.270237		.364995		.812181	1	.999791

POSITRON Z = 29, A = 62

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.215920	.819242	- 1	-.624783	- 2	.267677	- 1	.316687		.920906
1.0	.444549	.368643		-.276592	- 1	.719601	- 1	.863973		.978331
1.5	.523273	.731126		-.536735	- 1	.109775		.134411	1	.990193
2.0	.553923	.111337	1	-.797274	- 1	.142331		.178212	1	.994448
2.5	.567244	.150002	1	-.104566		.171386		.219821	1	.996436
3.0	.573284	.188700	1	-.127858		.197811		.260237	1	.997521
3.5	.575898	.227336	1	-.149524		.222050		.299964	1	.998177
4.0	.576765	.265900	1	-.169554		.244340		.339275	1	.998603
4.5	.576694	.304405	1	-.187958		.264819		.378330	1	.998896
5.0	.576101	.342874	1	-.204751		.283572		.417228	1	.999105
5.5	.575215	.381326	1	-.219947		.300653		.456034	1	.999261
6.0	.574168	.419779	1	-.233555		.316099		.494794	1	.999379
6.5	.573036	.458248	1	-.245584		.329933		.533541	1	.999470
7.0	.571866	.496748	1	-.256042		.342172		.572301	1	.999543
7.5	.570686	.535289	1	-.264932		.352829		.611092	1	.999602
8.0	.569515	.573882	1	-.272258		.361911		.649930	1	.999650
8.5	.568362	.612538	1	-.278020		.369423		.688830	1	.999690
9.0	.567235	.651264	1	-.282220		.375367		.727801	1	.999724
9.5	.566137	.690068	1	-.284857		.379746		.766853	1	.999752
10.0	.565070	.728958	1	-.285929		.382558		.805996	1	.999776

$$\text{POSITRON} \quad Z = 30, \quad A = 66$$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.204494	.801446	− 1	−.633427	− 2	.269382	− 1	.307963		.916038
1.0	.433943	.364736		−.283673	− 1	.735416	− 1	.853046		.976864
1.5	.514035	.725089		−.551948	− 1	.112584		.133147	1	.989516
2.0	.545226	.110498	1	−.820767	− 1	.146177		.176730	1	.994062
2.5	.558720	.148908	1	−.107717		.176153		.218091	1	.996188
3.0	.564778	.187337	1	−.131779		.203425		.258240	1	.997348
3.5	.567341	.225694	1	−.154182		.228458		.297690	1	.998049
4.0	.568128	.263972	1	−.174921		.251502		.336717	1	.998506
4.5	.567964	.302188	1	−.194008		.272703		.375484	1	.998819
5.0	.567276	.340365	1	−.211459		.292149		.414091	1	.999043
5.5	.566295	.378524	1	−.227289		.309899		.452607	1	.999209
6.0	.565154	.416682	1	−.241510		.325989		.491077	1	.999335
6.5	.563933	.454858	1	−.254131		.340446		.529535	1	.999433
7.0	.562678	.493066	1	−.265160		.353289		.568008	1	.999511
7.5	.561417	.531317	1	−.274602		.364529		.606515	1	.999574
8.0	.560168	.569623	1	−.282460		.374174		.645072	1	.999626
8.5	.558942	.607993	1	−.288735		.382230		.683694	1	.999668
9.0	.557745	.646438	1	−.293430		.388701		.722391	1	.999704
9.5	.556580	.684965	1	−.296542		.393587		.761175	1	.999735
10.0	.555449	.723581	1	−.298070		.396888		.800053	1	.999760

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.193820	.784397	- 1	-.642814	- 2	.270901	- 1	.299564		.911084
1.0	.424024	.361053		-.291305	- 1	.751280	- 1	.842598		.975353
1.5	.505498	.719450		-.568501	- 1	.115452		.131948	1	.988818
2.0	.537237	.109715	1	-.846620	- 1	.150157		.175330	1	.993663
2.5	.550905	.147884	1	-.111229		.181150		.216454	1	.995931
3.0	.556978	.186057	1	-.136206		.209387		.256346	1	.997169
3.5	.559487	.224145	1	-.159516		.235354		.295524	1	.997918
4.0	.560190	.262146	1	-.181155		.259315		.334271	1	.998405
4.5	.559930	.300078	1	-.201138		.281422		.372751	1	.998739
5.0	.559142	.337966	1	-.219484		.301771		.411067	1	.998978
5.5	.558062	.375832	1	-.236210		.320420		.449288	1	.999155
6.0	.556826	.413695	1	-.251328		.337411		.487461	1	.999290
6.5	.555513	.451574	1	-.264849		.352772		.525621	1	.999395
7.0	.554169	.489483	1	-.276782		.366521		.563795	1	.999478
7.5	.552825	.527434	1	-.287133		.378672		.602002	1	.999545
8.0	.551496	.565441	1	-.295904		.389233		.640260	1	.999600
8.5	.550195	.603512	1	-.303099		.398212		.678583	1	.999646
9.0	.548925	.641657	1	-.308718		.405611		.716983	1	.999684
9.5	.547692	.679885	1	-.312763		.411433		.755469	1	.999717
10.0	.546496	.718203	1	-.315230		.415677		.794052	1	.999744

POSITRON Z = 32, A = 71

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.183566	.767535	− 1	−.650382	− 2	.272028	− 1	.291295		.906051
1.0	.414132	.357351		−.298182	− 1	.766300	− 1	.832116		.973800
1.5	.496882	.713750		−.583458	− 1	.118179		.130741	1	.988097
2.0	.529130	.108923	1	−.869793	− 1	.153915		.173917	1	.993252
2.5	.542953	.146849	1	−.114340		.185820		.214806	1	.995666
3.0	.549030	.184765	1	−.140079		.214894		.254443	1	.996984
3.5	.551478	.222586	1	−.164119		.241645		.293354	1	.997782
4.0	.552092	.260312	1	−.186460		.266352		.331827	1	.998300
4.5	.551732	.297966	1	−.207120		.289173		.370029	1	.998656
5.0	.550842	.335572	1	−.226119		.310208		.408065	1	.998911
5.5	.549662	.373154	1	−.243477		.329520		.446006	1	.999100
6.0	.548329	.410734	1	−.259206		.347153		.483898	1	.999243
6.5	.546922	.448330	1	−.273320		.363136		.521780	1	.999355
7.0	.545490	.485956	1	−.285827		.377488		.559676	1	.999444
7.5	.544062	.523627	1	−.296733		.390225		.597609	1	.999516
8.0	.542653	.561356	1	−.306043		.401355		.635596	1	.999574
8.5	.541276	.599152	1	−.313760		.410885		.673650	1	.999623
9.0	.539934	.637025	1	−.319884		.418820		.711786	1	.999664
9.5	.538632	.674985	1	−.324416		.425160		.750013	1	.999698
10.0	.537371	.713039	1	−.327355		.429907		.788341	1	.999727

POSITRON Z = 33, A = 73

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.173949	.751303	- 1	-.658265	- 2	.272965	- 1	.283310		.900945
1.0	.404794	.353830		-.305387	- 1	.781253	- 1	.822025		.972206
1.5	.488823	.708373		-.599245	- 1	.120935		.129586	1	.987356
2.0	.521582	.108176	1	-.894441	- 1	.157750		.172571	1	.992829
2.5	.535558	.145872	1	-.117678		.190626		.213233	1	.995392
3.0	.541636	.183541	1	-.144269		.220610		.252623	1	.996794
3.5	.544019	.221103	1	-.169145		.248233		.291275	1	.997641
4.0	.544541	.258563	1	-.192307		.273785		.329478	1	.998193
4.5	.544078	.295943	1	-.213777		.297435		.367405	1	.998571
5.0	.543082	.333271	1	-.233578		.319286		.405162	1	.998842
5.5	.541799	.370573	1	-.251730		.339407		.442821	1	.999043
6.0	.540366	.407870	1	-.268249		.357841		.480431	1	.999195
6.5	.538864	.445181	1	-.283148		.374620		.518029	1	.999314
7.0	.537341	.482523	1	-.296437		.389765		.555642	1	.999409
7.5	.535826	.519910	1	-.308124		.403293		.593292	1	.999485
8.0	.534336	.557354	1	-.318212		.415213		.630996	1	.999547
8.5	.532880	.594866	1	-.326705		.425532		.668771	1	.999599
9.0	.531465	.632458	1	-.333606		.434254		.706628	1	.999642
9.5	.530093	.670137	1	-.338914		.441383		.744578	1	.999679
10.0	.528764	.707913	1	-.342628		.446917		.782632	1	.999710

POSITRON Z = 34, A = 76

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.164799	.735413 − 1	−.665251 − 2	.273614 − 1	.275509	.895772
1.0	.395673	.350366	−.312291 − 1	.795692 − 1	.812059	.970571
1.5	.480921	.703079	−.614446 − 1	.123621	.128446 1	.986594
2.0	.514170	.107441 1	−.918137 − 1	.161486	.171241 1	.992392
2.5	.528287	.144909 1	−.120875	.195299	.211682 1	.995111
3.0	.534357	.182335 1	−.148267	.226149	.250829 1	.996597
3.5	.536671	.219643 1	−.173919	.254592	.289225 1	.997497
4.0	.537096	.256839 1	−.197836	.280931	.327165 1	.998082
4.5	.536527	.293951 1	−.220044	.305344	.364823 1	.998483
5.0	.535423	.331008 1	−.240566	.327940	.402309 1	.998771
5.5	.534034	.368035 1	−.259426	.348789	.439694 1	.998984
6.0	.532499	.405056 1	−.276642	.367940	.477029 1	.999146
6.5	.530901	.442091 1	−.292227	.385424	.514353 1	.999272
7.0	.529286	.479156 1	−.306191	.401265	.551692 1	.999372
7.5	.527683	.516268 1	−.318544	.415479	.589070 1	.999453
8.0	.526110	.553438 1	−.329291	.428077	.626506 1	.999519
8.5	.524577	.590678 1	−.338435	.439067	.664013 1	.999574
9.0	.523087	.627999 1	−.345979	.448453	.701605 1	.999620
9.5	.521644	.665411 1	−.351923	.456238	.739295 1	.999659
10.0	.520248	.702923 1	−.356266	.462422	.777091 1	.999692

POSITRON Z = 35, A = 79

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.156138	.719946	− 1	−.671773	− 2	.274026	− 1	.267920		.890535
1.0	.386866	.346996		−.319110	− 1	.809784	− 1	.802300		.968895
1.5	.473296	.697944		−.629545	− 1	.126272		.127332	1	.985811
2.0	.507023	.106727	1	−.941704	− 1	.165186		.169945	1	.991944
2.5	.521273	.143974	1	−.124056		.199931		.210169	1	.994822
3.0	.527331	.181162	1	−.152244		.231641		.249079	1	.996395
3.5	.529569	.218221	1	−.178667		.260899		.287225	1	.997348
4.0	.529894	.255160	1	−.203336		.288021		.324907	1	.997968
4.5	.529216	.292009	1	−.226276		.313192		.362301	1	.998393
5.0	.528002	.328799	1	−.247516		.336528		.399519	1	.998698
5.5	.526505	.365556	1	−.267081		.358102		.436635	1	.998923
6.0	.524866	.402306	1	−.284989		.377964		.473701	1	.999095
6.5	.523169	.439070	1	−.301257		.396151		.510755	1	.999229
7.0	.521460	.475864	1	−.315896		.412684		.547826	1	.999335
7.5	.519769	.512704	1	−.328914		.427583		.584937	1	.999421
8.0	.518112	.549605	1	−.340319		.440858		.622107	1	.999491
8.5	.516499	.586578	1	−.350114		.452518		.659351	1	.999549
9.0	.514934	.623634	1	−.358301		.462568		.696684	1	.999598
9.5	.513420	.660783	1	−.364882		.471010		.734117	1	.999639
10.0	.511956	.698035	1	−.369856		.477847		.771661	1	.999674

POSITRON Z = 36, A = 81

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.147982	.704980 − 1	−.678219 − 2	.274255 − 1	.260570	.885242
1.0	.378470	.343763	−.326046 − 1	.823704 − 1	.792838	.967180
1.5	.466075	.693049	−.644992 − 1	.128924	.126259 1	.985007
2.0	.500277	.106048 1	−.965906 − 1	.168908	.168698 1	.991483
2.5	.514658	.143083 1	−.127334	.204610	.208714 1	.994524
3.0	.520699	.180041 1	−.156358	.237212	.247394 1	.996188
3.5	.522859	.216858 1	−.183597	.267320	.285295 1	.997195
4.0	.523079	.253547 1	−.209066	.295266	.322723 1	.997850
4.5	.522288	.290138 1	−.232796	.321243	.359858 1	.998300
5.0	.520960	.326665 1	−.254817	.345373	.396812 1	.998622
5.5	.519352	.363157 1	−.275156	.367733	.433661 1	.998861
6.0	.517608	.399639 1	−.293833	.388375	.470458 1	.999043
6.5	.515809	.436132 1	−.310867	.407337	.507243 1	.999184
7.0	.514005	.472656 1	−.326269	.424644	.544045 1	.999296
7.5	.512224	.509226 1	−.340050	.440315	.580887 1	.999387
8.0	.510482	.545857 1	−.352216	.454362	.617790 1	.999461
8.5	.508787	.582561 1	−.362772	.466795	.654768 1	.999523
9.0	.507146	.619349 1	−.371721	.477618	.691836 1	.999574
9.5	.505558	.656232 1	−.379065	.486835	.729007 1	.999618
10.0	.504025	.693220 1	−.384803	.494448	.766291 1	.999655

POSITRON Z = 37, A = 83

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.140264	.690414 − 1	−.684227 − 2	.274276 − 1	.253423	.879897
1.0	.370367	.340622	−.332902 − 1	.837309 − 1	.783579	.965426
1.5	.459117	.688312	−.660343 − 1	.131545	.125211 1	.984182
2.0	.493785	.105391 1	−.989982 − 1	.172598	.167483 1	.991009
2.5	.508289	.142219 1	−.130594	.209253	.207296 1	.994218
3.0	.514309	.178954 1	−.160448	.242740	.245752 1	.995974
3.5	.516385	.215534 1	−.188497	.273691	.283415 1	.997037
4.0	.516497	.251977 1	−.214760	.302453	.320594 1	.997729
4.5	.515590	.288316 1	−.239272	.329229	.357474 1	.998205
5.0	.514146	.324586 1	−.262066	.354144	.394169 1	.998545
5.5	.512425	.360817 1	−.283170	.377281	.430756 1	.998797
6.0	.510573	.397035 1	−.302609	.398695	.467290 1	.998989
6.5	.508672	.433264 1	−.320401	.418425	.503810 1	.999138
7.0	.506770	.469522 1	−.336559	.436498	.540347 1	.999257
7.5	.504897	.505827 1	−.351094	.452933	.576926 1	.999353
8.0	.503068	.542192 1	−.364014	.467745	.613565 1	.999431
8.5	.501292	.578631 1	−.375324	.480942	.650282 1	.999496
9.0	.499572	.615156 1	−.385028	.492532	.687090 1	.999550
9.5	.497911	.651778 1	−.393128	.502517	.724003 1	.999596
10.0	.496308	.688506 1	−.399623	.510900	.761032 1	.999636

POSITRON Z = 38, A = 86

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.132921	.676141	− 1	−.689460	− 2	.274060	− 1	.246442		.874505
1.0	.362436	.337527		−.339490	− 1	.850445	− 1	.774422		.963634
1.5	.452276	.683641		−.675173	− 1	.134102		.124175	1	.983337
2.0	.487390	.104743	1	−.101321		.176199		.166282	1	.990524
2.5	.502008	.141367	1	−.133730		.213774		.205896	1	.993904
3.0	.507998	.177881	1	−.164366		.248107		.244130	1	.995755
3.5	.509986	.214228	1	−.193171		.279855		.281558	1	.996876
4.0	.509986	.250429	1	−.220168		.309381		.318494	1	.997605
4.5	.508960	.286519	1	−.245395		.336896		.355124	1	.998107
5.0	.507398	.322536	1	−.268890		.362533		.391566	1	.998466
5.5	.505562	.358512	1	−.290683		.386377		.427899	1	.998731
6.0	.503600	.394474	1	−.310799		.408486		.464177	1	.998934
6.5	.501595	.430445	1	−.329259		.428902		.500441	1	.999091
7.0	.499596	.466446	1	−.346077		.447653		.536724	1	.999216
7.5	.497630	.502493	1	−.361265		.464759		.573049	1	.999317
8.0	.495714	.538603	1	−.374832		.480236		.609437	1	.999400
8.5	.493855	.574788	1	−.386784		.494094		.645905	1	.999468
9.0	.492057	.611062	1	−.397124		.506338		.682468	1	.999526
9.5	.490323	.647435	1	−.405854		.516975		.719138	1	.999574
10.0	.488650	.683917	1	−.412976		.526005		.755928	1	.999616

POSITRON Z = 39, A = 89

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.125972	.662243	− 1	−.694311	− 2	.273659	− 1	.239656		.869071
1.0	.354777	.334519		−.346014	− 1	.863287	− 1	.765456		.961805
1.5	.445681	.679118		−.689936	− 1	.136632		.123163	1	.982472
2.0	.481231	.104115	1	−.103635		.179771		.165111	1	.990026
2.5	.495956	.140541	1	−.136854		.218264		.204531	1	.993582
3.0	.501912	.176839	1	−.168269		.253438		.242550	1	.995530
3.5	.503807	.212958	1	−.197826		.285979		.279748	1	.996710
4.0	.503692	.248922	1	−.225553		.316264		.316445	1	.997478
4.5	.502544	.284769	1	−.251492		.344513		.352830	1	.998006
5.0	.500861	.320538	1	−.275683		.370866		.389024	1	.998384
5.5	.498908	.356264	1	−.298160		.395413		.425106	1	.998664
6.0	.496835	.391973	1	−.318951		.418213		.461133	1	.998877
6.5	.494724	.427691	1	−.338075		.439311		.497147	1	.999043
7.0	.492626	.463439	1	−.355551		.458737		.533179	1	.999174
7.5	.490566	.499234	1	−.371390		.476512		.569255	1	.999281
8.0	.488561	.535092	1	−.385602		.492652		.605396	1	.999368
8.5	.486619	.571028	1	−.398193		.507168		.641619	1	.999440
9.0	.484743	.607054	1	−.409168		.520067		.677941	1	.999500
9.5	.482933	.643183	1	−.418529		.531355		.714373	1	.999552
10.0	.481189	.679424	1	−.426278		.541032		.750928	1	.999595

POSITRON Z = 40, A = 90

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.119475	.648902	- 1	-.699481	- 2	.273171	- 1	.233123		.863600
1.0	.347601	.331691		-.352858	- 1	.876193	- 1	.756879		.959939
1.5	.439603	.674925		-.705493	- 1	.139205		.122206	1	.981586
2.0	.475606	.103535	1	-.106087		.183432		.164008	1	.989516
2.5	.490441	.139775	1	-.140184		.222895		.203246	1	.993252
3.0	.496362	.175869	1	-.172455		.258972		.241058	1	.995300
3.5	.498161	.211769	1	-.202850		.292376		.278033	1	.996540
4.0	.497927	.247504	1	-.231403		.323501		.314496	1	.997348
4.5	.496653	.283114	1	-.258161		.352577		.350641	1	.997903
5.0	.494845	.318641	1	-.283167		.379749		.386588	1	.998300
5.5	.492772	.354118	1	-.306457		.405110		.422420	1	.998595
6.0	.490583	.389577	1	-.328061		.428727		.458194	1	.998819
6.5	.488365	.425042	1	-.348002		.450643		.493953	1	.998993
7.0	.486164	.460534	1	-.366298		.470890		.529729	1	.999132
7.5	.484008	.496073	1	-.382962		.489492		.565549	1	.999243
8.0	.481912	.531675	1	-.398005		.506466		.601434	1	.999335
8.5	.479884	.567354	1	-.411434		.521822		.637401	1	.999411
9.0	.477927	.603124	1	-.423254		.535571		.673468	1	.999474
9.5	.476041	.638997	1	-.433469		.547715		.709646	1	.999528
10.0	.474225	.674983	1	-.442080		.558259		.745949	1	.999574

POSITRON Z = 41, A = 91

p	F_o	f_1		g_1		f_{-1}		g_1		Sin Δ
.5	.113330	.635920	- 1	-.704286	- 2	.272524	- 1	.226777		.858097
1.0	.340684	.328951		-.359645	- 1	.888846	- 1	.743494		.958037
1.5	.433765	.670885		-.720996	- 1	.141755		.121275	1	.980681
2.0	.470214	.102976	1	-.108532		.187070		.162938	1	.988994
2.5	.485155	.139037	1	-.143503		.227500		.201998	1	.992914
3.0	.491036	.174932	1	-.176624		.264475		.239609	1	.995063
3.5	.492736	.210619	1	-.207851		.298736		.276366	1	.996366
4.0	.492379	.246130	1	-.237223		.330692		.312601	1	.997214
4.5	.490976	.281508	1	-.264791		.360586		.348510	1	.997797
5.0	.489039	.316796	1	-.290603		.388567		.384216	1	.998214
5.5	.486843	.352031	1	-.314697		.414735		.419802	1	.998524
6.0	.484538	.387244	1	-.337105		.439157		.455327	1	.998759
6.5	.482209	.422460	1	-.357852		.461881		.490836	1	.998942
7.0	.479904	.457702	1	-.376957		.482939		.526361	1	.999088
7.5	.477651	.492990	1	-.394436		.502358		.561929	1	.999205
8.0	.475463	.528339	1	-.410299		.520154		.597562	1	.999301
8.5	.473348	.563767	1	-.424555		.536341		.633279	1	.999381
9.0	.471309	.599285	1	-.437210		.550928		.669094	1	.999448
9.5	.469346	.634906	1	-.448268		.563919		.705024	1	.999504
10.0	.467456	.670642	1	-.457729		.575319		.741079	1	.999553

POSITRON $Z = 42$, $A = 94$

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.107443	.623087	– 1	–.708067	– 2	.271639	– 1	.220546		.852565
1.0	.333785	.326197		–.365997	– 1	.900889	– 1	.740086		.956099
1.5	.427864	.666799		–.735595	– 1	.144212		.120336	1	.979756
2.0	.464729	.102410	1	–.110826		.190569		.161856	1	.988460
2.5	.479761	.138289	1	–.146598		.231908		.200739	1	.992568
3.0	.485595	.173984	1	–.180485		.269710		.238149	1	.994822
3.5	.487189	.209458	1	–.212449		.304747		.274692	1	.996188
4.0	.486705	.244746	1	–.242534		.337444		.310702	1	.997077
4.5	.485171	.279895	1	–.270795		.368053		.346380	1	.997688
5.0	.483106	.314950	1	–.297284		.396730		.381851	1	.998126
5.5	.480786	.349948	1	–.322043		.423581		.417201	1	.998451
6.0	.478364	.384921	1	–.345106		.448674		.452488	1	.998698
6.5	.475924	.419898	1	–.366498		.472060		.487759	1	.998890
7.0	.473515	.454900	1	–.386243		.493774		.523047	1	.999043
7.5	.471164	.489949	1	–.404354		.513843		.558380	1	.999166
8.0	.468885	.525061	1	–.420845		.532285		.593780	1	.999267
8.5	.466683	.560252	1	–.435724		.549114		.629265	1	.999351
9.0	.464563	.595536	1	–.448998		.564339		.664853	1	.999421
9.5	.462522	.630927	1	–.460671		.577966		.700558	1	.999480
10.0	.460560	.666435	1	–.470745		.590000		.736393	1	.999531

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.101947	.610789	- 1	-.712204	- 2	.270705	- 1	.214557		.847010
1.0	.327352	.323625		-.372686	- 1	.913061	- 1	.732071		.954127
1.5	.422478	.663053		-.751017	- 1	.146720		.119452	1	.978811
2.0	.459780	.101893	1	-.113261		.194166		.160846	1	.987914
2.5	.474908	.137604	1	-.149901		.236467		.199563	1	.992214
3.0	.480693	.173111	1	-.184630		.275158		.236782	1	.994574
3.5	.482179	.208382	1	-.217415		.311039		.273117	1	.996005
4.0	.481565	.243456	1	-.248305		.344555		.308909	1	.996937
4.5	.479895	.278382	1	-.277362		.375966		.344360	1	.997578
5.0	.477697	.313208	1	-.304641		.405438		.379598	1	.998036
5.5	.475249	.347972	1	-.330187		.433077		.414711	1	.998376
6.0	.472706	.382709	1	-.354037		.458959		.449760	1	.998635
6.5	.470152	.417446	1	-.376219		.483136		.484790	1	.998837
7.0	.467636	.452207	1	-.396755		.505644		.519836	1	.998997
7.5	.465185	.487013	1	-.415663		.526512		.554926	1	.999126
8.0	.462811	.521882	1	-.432957		.545759		.590082	1	.999232
8.5	.460521	.556830	1	-.448645		.563400		.625326	1	.999319
9.0	.458316	.591871	1	-.462736		.579446		.660673	1	.999393
9.5	.456197	.627019	1	-.475234		.593904		.696138	1	.999455
10.0	.454160	.662287	1	-.486142		.606777		.731734	1	.999508

POSITRON Z = 44, A = 100

p	F_0			f_1			g_1			f_{-1}			g_{-1}		Sin Δ
.5	.966096	−	1	.598420	−	1	−.714710	−	2	.269456	−	1	.208611		.841434
1.0	.320689			.320930			−.378574	−	1	.924250	−	1	.723803		.952121
1.5	.416712			.659044			−.764711	−	1	.149061			.118526	1	.977847
2.0	.454392			.101337	1		−.115407			.197506			.159779	1	.987356
2.5	.469592			.136869	1		−.152778			.240659			.198323	1	.991853
3.0	.475315			.172179	1		−.188190			.280109			.235346	1	.994321
3.5	.476686			.207241	1		−.221617			.316686			.271472	1	.995818
4.0	.475939			.242098	1		−.253115			.350851			.307047	1	.996794
4.5	.474133			.276802	1		−.282751			.382876			.342277	1	.997464
5.0	.471802			.311401	1		−.310584			.412934			.377292	1	.997944
5.5	.469228			.345938	1		−.336661			.441136			.412181	1	.998300
6.0	.466565			.380447	1		−.361022			.467560			.447006	1	.998571
6.5	.463900			.414957	1		−.383697			.492261			.481814	1	.998782
7.0	.461279			.449493	1		−.404710			.515278			.516641	1	.998950
7.5	.458729			.484076	1		−.424079			.536638			.551516	1	.999085
8.0	.456263			.518725	1		−.441818			.556365			.586462	1	.999195
8.5	.453886			.553457	1		−.457939			.574473			.621499	1	.999287
9.0	.451600			.588287	1		−.472448			.590972			.656645	1	.999364
9.5	.449404			.623229	1		−.485351			.605870			.691915	1	.999429
10.0	.447294			.658296	1		−.496651			.619173			.727323	1	.999485

POSITRON Z = 45, A = 101

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.916963 - 1	.586765 - 1	-.718247 - 2	.268272 - 1	.202963	.835843
1.0	.314706	.318518	-.385183 - 1	.935976 - 1	.716137	.950082
1.5	.411747	.655577	-.780088 - 1	.151533	.117688 1	.976864
2.0	.449855	.100859 1	-.117838	.201068	.158826 1	.986786
2.5	.465143	.136234 1	-.156072	.245180	.197214 1	.991483
3.0	.470808	.171366 1	-.192318	.285510	.234057 1	.994062
3.5	.472063	.206234 1	-.226556	.322922	.269985 1	.995627
4.0	.471179	.240886 1	-.258849	.357894	.305350 1	.996647
4.5	.469231	.275377 1	-.289269	.390709	.340362 1	.997348
5.0	.466761	.309757 1	-.317878	.421547	.375153 1	.997850
5.5	.464054	.344069 1	-.344729	.450525	.409814 1	.998222
6.0	.461266	.378349 1	-.369863	.477723	.444409 1	.998506
6.5	.458483	.412628 1	-.393313	.503200	.478985 1	.998726
7.0	.455753	.446931 1	-.415103	.526996	.513578 1	.998901
7.5	.453099	.481280 1	-.435255	.549142	.548219 1	.999043
8.0	.450537	.515695 1	-.453782	.569660	.582931 1	.999159
8.5	.448069	.550193 1	-.470698	.588566	.617735 1	.999255
9.0	.445698	.584789 1	-.486010	.605873	.652649 1	.999335
9.5	.443421	.619498 1	-.499725	.621588	.687688 1	.999403
10.0	.441235	.654332 1	-.511845	.635717	.722867 1	.999461

POSITRON Z = 46, A = 104

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.869847 − 1	.575221 − 1	−.720863 − 2	.266883 − 1	.197415	.830240
1.0	.308709	.316080	−.391385 − 1	.947109 − 1	.708424	.948011
1.5	.406686	.652041	−.794615 − 1	.153913	.116840 1	.975861
2.0	.445191	.100371 1	−.120127	.204497	.157858 1	.986205
2.5	.460552	.135585 1	−.159157	.249513	.196089 1	.991105
3.0	.466151	.170537 1	−.196160	.290659	.232750 1	.993798
3.5	.467284	.205211 1	−.231120	.328831	.268482 1	.995432
4.0	.466260	.239659 1	−.264109	.364525	.303640 1	.996497
4.5	.464168	.273938 1	−.295205	.398037	.338439 1	.997229
5.0	.461558	.308101 1	−.324474	.429552	.373013 1	.997754
5.5	.458719	.342194 1	−.351972	.459193	.407454 1	.998143
6.0	.455806	.376252 1	−.377743	.487044	.441828 1	.998439
6.5	.452906	.410308 1	−.401822	.513166	.476184 1	.998669
7.0	.450065	.444389 1	−.424235	.537601	.510557 1	.998852
7.5	.447310	.478516 1	−.445004	.560383	.544980 1	.999000
8.0	.444650	.512710 1	−.464146	.581533	.579476 1	.999121
8.5	.442093	.546989 1	−.481673	.601070	.614067 1	.999221
9.0	.439637	.581369 1	−.497594	.619005	.648771 1	.999305
9.5	.437280	.615865 1	−.511916	.635349	.683605 1	.999376
10.0	.435019	.650490 1	−.524643	.650106	.718582 1	.999437

POSITRON Z = 47, A = 107

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.825293 − 1	.563978	− 1	−.723229 − 2		.265390	− 1	.192027		.824629
1.0	.302919	.313717		−.397562 − 1		.958042	− 1	.700877		.945908
1.5	.401821	.648639		−.809149 − 1		.156278		.116012	1	.974840
2.0	.440721	.999011		−.122418		.207912		.156916	1	.985612
2.5	.456150	.134960	1	−.162245		.253832		.194995	1	.990720
3.0	.461679	.169736	1	−.200001		.295793		.231480	1	.993528
3.5	.462687	.204221	1	−.235682		.334722		.267020	1	.995233
4.0	.461518	.238469	1	−.269364		.371136		.301976	1	.996344
4.5	.459280	.272540	1	−.301132		.405340		.336565	1	.997108
5.0	.456527	.306492	1	−.331057		.437528		.370926	1	.997655
5.5	.453552	.340369	1	−.359199		.467828		.405152	1	.998061
6.0	.450512	.374210	1	−.385604		.496329		.439310	1	.998370
6.5	.447493	.408047	1	−.410308		.523093		.473449	1	.998611
7.0	.444542	.441909	1	−.433342		.548165		.507608	1	.998802
7.5	.441682	.475818	1	−.454727		.571578		.541816	1	.998956
8.0	.438926	.509796	1	−.474480		.593359		.576101	1	.999082
8.5	.436277	.543861	1	−.492617		.613524		.610483	1	.999187
9.0	.433736	.578029	1	−.509146		.632088		.644982	1	.999275
9.5	.431299	.612316	1	−.524074		.649059		.679614	1	.999349
10.0	.428962	.646736	1	−.537406		.664444		.714395	1	.999412

POSITRON $Z = 48$, $A = 109$

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.783464 − 1	.553126 − 1	−.725669 − 2	.263851 − 1	.186826	.819013
1.0	.297446	.311484	−.403906 − 1	.968989 − 1	.693606	.943775
1.5	.397302	.645475	−.824116 − 1	.158669	.115224 1	.973800
2.0	.436607	.994660	−.124783	.211378	.156024 1	.985007
2.5	.452108	.134379 1	−.165437	.258228	.193960 1	.990326
3.0	.457564	.168988 1	−.203983	.301032	.230276 1	.993252
3.5	.458442	.203291 1	−.240421	.340749	.265629 1	.995029
4.0	.457125	.237345 1	−.274838	.377915	.300389 1	.996188
4.5	.454736	.271216 1	−.307323	.412849	.334773 1	.996984
5.0	.451837	.304959 1	−.337954	.445752	.368925 1	.997555
5.5	.448724	.338625 1	−.366792	.476758	.402938 1	.997978
6.0	.445553	.372251 1	−.393888	.505958	.436881 1	.998300
6.5	.442412	.405872 1	−.419280	.533418	.470804 1	.998551
7.0	.439347	.439517 1	−.443000	.559185	.504747 1	.998750
7.5	.436381	.473209 1	−.465071	.583296	.538741 1	.998911
8.0	.433526	.506970 1	−.485512	.605775	.572812 1	.999043
8.5	.430784	.540819 1	−.504339	.626643	.606982 1	.999152
9.0	.428155	.574774 1	−.521561	.645913	.641271 1	.999243
9.5	.425636	.608849 1	−.537187	.663596	.675697 1	.999321
10.0	.423222	.643059 1	−.551221	.679698	.710274 1	.999387

POSITRON Z = 49, A = 111

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.743908 - 1	.542560 - 1		-.727880 - 2		.262225 - 1		.181778		.813395
1.0	.292168	.309325		-.410234 - 1		.979764 - 1		.686497		.941611
1.5	.392971	.642445		-.839108 - 1		.161049		.114458	1	.972742
2.0	.432682	.990499		-.127152		.214837		.155159	1	.984390
2.5	.448250	.133822	1	-.168635		.262617		.192957	1	.989925
3.0	.453630	.168270	1	-.207967		.306261		.229109	1	.992971
3.5	.454375	.202395	1	-.245160		.346762		.264281	1	.994822
4.0	.452906	.236260	1	-.280307		.384677		.298847	1	.996028
4.5	.450362	.269933	1	-.313505		.420336		.333032	1	.996858
5.0	.447314	.303473	1	-.344836		.453949		.366978	1	.997452
5.5	.444059	.336931	1	-.374365		.485654		.400783	1	.997893
6.0	.440756	.370348	1	-.402146		.515548		.434515	1	.998229
6.5	.437492	.403757	1	-.428220		.543698		.468226	1	.998490
7.0	.434311	.437188	1	-.452620		.570156		.501958	1	.998698
7.5	.431237	.470667	1	-.475371		.594957		.535741	1	.998865
8.0	.428281	.504216	1	-.496495		.618130		.569602	1	.999003
8.5	.425445	.537854	1	-.516006		.639695		.603566	1	.999116
9.0	.422728	.571599	1	-.533916		.659666		.637650	1	.999212
9.5	.420126	.605467	1	-.550234		.678056		.671873	1	.999292
10.0	.417634	.639472	1	-.564965		.694870		.706252	1	.999361

POSITRON Z = 50, A = 118

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.705097 - 1	.531778 - 1	-.728353 - 2	.260275 - 1	.176725	.807779
1.0	.286509	.306962	-.415620 - 1	.989319 - 1	.678979	.939418
1.5	.388054	.638993	-.852050 - 1	.163216	.113622 1	.971665
2.0	.428089	.985710	-.129180	.217977	.154205 1	.983762
2.5	.443691	.133184 1	-.171334	.266561	.191850 1	.989516
3.0	.448980	.167456 1	-.211276	.310900	.227828 1	.992685
3.5	.449586	.201392 1	-.249026	.352021	.262813 1	.994610
4.0	.447963	.235061 1	-.284687	.390501	.297186 1	.995865
4.5	.445267	.268533 1	-.318362	.426683	.331174 1	.996729
5.0	.442074	.301871 1	-.350137	.460784	.364923 1	.997348
5.5	.438681	.335126 1	-.380083	.492948	.398531 1	.997807
6.0	.435251	.368341 1	-.408254	.523276	.432070 1	.998156
6.5	.431867	.401551 1	-.434696	.551838	.465592 1	.998428
7.0	.428576	.434787 1	-.459442	.578687	.499139 1	.998644
7.5	.425399	.468076 1	-.482520	.603860	.532743 1	.998819
8.0	.422347	.501439 1	-.503950	.627387	.566433 1	.998961
8.5	.419422	.534898 1	-.523749	.649288	.600232 1	.999080
9.0	.416622	.568471 1	-.541930	.669581	.634161 1	.999179
9.5	.413941	.602174 1	-.558501	.688275	.668237 1	.999263
10.0	.411375	.636024 1	-.573467	.705378	.702479 1	.999335

POSITRON $Z = 51$, $A = 121$

p	F_o	f_1		g_1	f_{-1}		g_{-1}		Sin Δ
.5	.669496 − 1	.521659 − 1		−.729854 − 2	.258447 − 1		.171939		.802168
1.0	.281489	.304889		−.421743 − 1	.999544 − 1		.672067		.937196
1.5	.383928	.636104		−.866698 − 1	.165533		.112878	1	.970571
2.0	.424349	.931743		−.131493	.221358		.153368	1	.983123
2.5	.440006	.132652	1	−.174445	.270850		.190881	1	.989100
3.0	.445207	.166767	1	−.215138	.315999		.226700	1	.992392
3.5	.445671	.200531	1	−.253602	.357869		.261511	1	.994394
4.0	.443890	.234017	1	−.289947	.397057		.295698	1	.995699
4.5	.441034	.267298	1	−.324283	.433919		.329494	1	.996597
5.0	.437686	.300440	1	−.356703	.468681		.363046	1	.997241
5.5	.434149	.333496	1	−.387282	.501494		.396456	1	.997718
6.0	.430583	.366509	1	−.416077	.532460		.429795	1	.998082
6.5	.427074	.399517	1	−.443135	.561655		.463117	1	.998365
7.0	.423665	.432552	1	−.468493	.589132		.496466	1	.998590
7.5	.420380	.465639	1	−.492180	.614932		.529874	1	.998771
8.0	.417227	.498803	1	−.514217	.639085		.563370	1	.998920
8.5	.414207	.532065	1	−.534623	.661614		.596979	1	.999043
9.0	.411317	.565444	1	−.553411	.682534		.630721	1	.999146
9.5	.408554	.598957	1	−.570589	.701859		.664615	1	.999233
10.0	.405910	.632621	1	−.586165	.719596		.698679	1	.999308

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POSITRON Z = 52, A = 123

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.636088 - 1	.511900 - 1	-.731461 - 2	.256602 - 1	.167324	.796565
1.0	.276758	.302942	-.428047 - 1	.100983	.665421	.934946
1.5	.380130	.633453	-.881806 - 1	.167883	.112173 1	.969458
2.0	.420953	.978119	-.133883	.224799	.152580 1	.982472
2.5	.436668	.132164 1	-.177665	.275224	.189969 1	.988675
3.0	.441779	.166130 1	-.219142	.321210	.225637 1	.992095
3.5	.442097	.199729 1	-.258354	.363857	.260280 1	.994174
4.0	.440152	.233039 1	-.295421	.403785	.294287 1	.995530
4.5	.437132	.266136 1	-.330461	.441362	.327895 1	.996463
5.0	.433627	.299086 1	-.363571	.476824	.361254 1	.997132
5.5	.429941	.331947 1	-.394830	.510325	.394467 1	.997628
6.0	.426236	.364762 1	-.424300	.541976	.427608 1	.998006
6.5	.422597	.397570 1	-.452030	.571852	.460732 1	.998300
7.0	.419069	.430404 1	-.478060	.600011	.493882 1	.998534
7.5	.415672	.463291 1	-.502419	.626494	.527093 1	.998722
8.0	.412414	.496255 1	-.525131	.651334	.560394 1	.998877
8.5	.409297	.529319 1	-.546215	.674555	.593809 1	.999005
9.0	.406317	.562502 1	-.565685	.696173	.627360 1	.999112
9.5	.403469	.595821 1	-.583552	.716202	.661067 1	.999203
10.0	.400745	.629295 1	-.599822	.734651	.694948 1	.999281

POSITRON Z = 53, A = 123

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.605002 - 1	.502593 - 1	-.733481 - 2	.254798 - 1	.162905	.790972
1.0	.272429	.301179	-.434728 - 1	.102044	.659161	.932670
1.5	.376821	.631161	-.897815 - 1	.170313	.111526 1	.968328
2.0	.418082	.975021	-.136421	.228369	.151866 1	.981810
2.5	.433865	.131742 1	-.181096	.279778	.189146 1	.988243
3.0	.438887	.165573 1	-.223424	.326656	.224674 1	.991791
3.5	.439055	.199019 1	-.263457	.370141	.259157 1	.993950
4.0	.436940	.232161 1	-.301325	.410873	.292991 1	.995358
4.5	.433749	.265080 1	-.337151	.449236	.326415 1	.996327
5.0	.430080	.297846 1	-.371041	.485474	.359584 1	.997021
5.5	.426239	.330515 1	-.403078	.519749	.392602 1	.997537
6.0	.422389	.363134 1	-.433327	.552173	.425544 1	.997929
6.5	.418616	.395744 1	-.461840	.582827	.458467 1	.998234
7.0	.414963	.428376 1	-.488658	.611772	.491413 1	.998477
7.5	.411450	.461059 1	-.513814	.639051	.524420 1	.998673
8.0	.408084	.493820 1	-.537334	.664697	.557516 1	.998833
8.5	.404866	.526679 1	-.559237	.688736	.590727 1	.998966
9.0	.401792	.559657 1	-.579538	.711187	.624075 1	.999078
9.5	.398855	.592772 1	-.598250	.732064	.657579 1	.999172
10.0	.396048	.626042 1	-.615380	.751376	.691259 1	.999253

POSITRON $Z = 54$, $A = 128$

p	F_o	f_1		g_1		f_{-1}	g_{-1}		Sin Δ
.5	.574377 − 1	.493045 − 1		−.733858 − 2		.252692 − 1	.158471		.785392
1.0	.267700	.299201		−.440484 − 1		.102980	.652467		.930367
1.5	.372895	.628420		−.911805 − 1		.172527	.110805	1	.967180
2.0	.414509	.971252		−.138625		.231619	.151057	1	.981136
2.5	.430325	.131235	1	−.184040		.283890	.188210	1	.987803
3.0	.435243	.164914	1	−.227050		.331521	.223588	1	.991483
3.5	.435255	.198194	1	−.267717		.375687	.257905	1	.993721
4.0	.432971	.231161	1	−.306179		.417051	.291563	1	.995182
4.5	.429612	.263898	1	−.342571		.456010	.324808	1	.996188
5.0	.425783	.296479	1	−.377001		.492818	.357794	1	.996909
5.5	.421793	.328960	1	−.409558		.527641	.390628	1	.997443
6.0	.417804	.361392	1	−.440311		.560599	.423388	1	.997850
6.5	.413902	.393815	1	−.469315		.591774	.456131	1	.998167
7.0	.410130	.426263	1	−.496612		.621229	.488902	1	.998419
7.5	.406506	.458765	1	−.522237		.649010	.521737	1	.998622
8.0	.403038	.491348	1	−.546217		.675152	.554666	1	.998789
8.5	.399725	.524035	1	−.568573		.699680	.587716	1	.998927
9.0	.396562	.556346	1	−.589321		.722616	.620910	1	.999043
9.5	.393542	.589801	1	−.608473		.743972	.654268	1	.999141
10.0	.390657	.622917	1	−.626038		.763761	.687809	1	.999224

POSITRON Z = 55, A = 131

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.545894 − 1	.483936 − 1		−.734672 − 2		.250638 − 1		.154226		.779827
1.0	.263361	.297403		−.446625 − 1		.103949		.646153		.928038
1.5	.369449	.626032		−.926712 − 1		.174822		.110141	1	.966015
2.0	.411452	.967999		−.140979		.234999		.150321	1	.980451
2.5	.427311	.130794	1	−.187200		.288185		.187361	1	.987356
3.0	.432125	.164334	1	−.230960		.336625		.222599	1	.991169
3.5	.431977	.197459	1	−.272333		.381533		.256758	1	.993489
4.0	.429518	.230259	1	−.311470		.423595		.290248	1	.995003
4.5	.425985	.262823	1	−.348512		.463224		.323317	1	.996046
5.0	.421989	.295223	1	−.383575		.500680		.356123	1	.996794
5.5	.417843	.327521	1	−.416752		.536139		.388776	1	.997348
6.0	.413710	.359768	1	−.448115		.569722		.421353	1	.997770
6.5	.409675	.392005	1	−.477722		.601518		.453913	1	.998099
7.0	.405778	.424268	1	−.505619		.631591		.486503	1	.998360
7.5	.402040	.456586	1	−.531842		.659989		.519160	1	.998571
8.0	.398466	.488988	1	−.556418		.686748		.551914	1	.998744
8.5	.395054	.521495	1	−.579372		.711897		.584793	1	.998887
9.0	.391798	.554131	1	−.600719		.735455		.617820	1	.999007
9.5	.388692	.586914	1	−.620472		.757439		.651016	1	.999109
10.0	.385726	.619864	1	−.638642		.777860		.684401	1	.999195

POSITRON   Z = 56, A = 133

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.519184 - 1	.475161 - 1		-.735632 - 2		.248593 - 1		.150136		.774280
1.0	.259294	.295732		-.452970 - 1		.104930		.640101		.925685
1.5	.366325	.623886		-.942126 - 1		.177158		.109517	1	.964833
2.0	.408736	.965099		-.143417		.238450		.149635	1	.979756
2.5	.424644	.130397	1	-.190475		.292578		.186571	1	.986901
3.0	.429351	.163807	1	-.235018		.341854		.221677	1	.990849
3.5	.429039	.196785	1	-.277134		.387534		.255685	1	.993252
4.0	.426399	.229426	1	-.316983		.430325		.289012	1	.994822
4.5	.422686	.261820	1	-.354715		.470656		.321909	1	.995902
5.0	.418519	.294046	1	-.390453		.508796		.354539	1	.996676
5.5	.414213	.326165	1	-.424295		.544930		.387012	1	.997251
6.0	.409931	.358230	1	-.456316		.579182		.419408	1	.997688
6.5	.405757	.390284	1	-.486579		.611644		.451787	1	.998029
7.0	.401734	.422363	1	-.515131		.642384		.484196	1	.998300
7.5	.397878	.454498	1	-.542010		.671451		.516674	1	.998519
8.0	.394194	.486717	1	-.567246		.698885		.549251	1	.998698
8.5	.390680	.519045	1	-.590863		.724713		.581956	1	.998846
9.0	.387330	.551504	1	-.612879		.748959		.614812	1	.998971
9.5	.384135	.584113	1	-.633309		.771638		.647842	1	.999076
10.0	.381086	.616892	1	-.652161		.792763		.681065	1	.999166

POSITRON Z = 57, A = 135

p	F_0	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.493921 - 1	.465616 - 1		-.736458 - 2	.246513 - 1	.146168		.768753
1.0	.255382	.294127		-.459339 - 1	.105902	.634194		.923307
1.5	.363364	.621866		-.957645 - 1	.179496	.108911	1	.963634
2.0	.406187	.962378		-.145871	.241909	.148975	1	.979049
2.5	.422140	.130024	1	-.193769	.296983	.185812	1	.986439
3.0	.426736	.163308	1	-.239096	.347096	.220789	1	.990524
3.5	.426255	.196143	1	-.281953	.393546	.254650	1	.993012
4.0	.423429	.228628	1	-.322512	.437064	.287818	1	.994636
4.5	.419532	.260858	1	-.360931	.478094	.320549	1	.995755
5.0	.415190	.292912	1	-.397341	.516917	.353006	1	.996557
5.5	.410721	.324857	1	-.431844	.553721	.385304	1	.997152
6.0	.406287	.356744	1	-.464521	.588638	.417524	1	.997605
6.5	.401974	.388619	1	-.495436	.621763	.449726	1	.997959
7.0	.397821	.420518	1	-.524639	.553166	.481959	1	.998239
7.5	.393845	.452475	1	-.552170	.682900	.514261	1	.998466
8.0	.390050	.484517	1	-.578062	.711005	.546667	1	.998651
8.5	.386433	.516669	1	-.602339	.737511	.579202	1	.998805
9.0	.382987	.548955	1	-.625021	.762442	.611893	1	.998934
9.5	.379703	.531395	1	-.646123	.785815	.644762	1	.999043
10.0	.376571	.614009	1	-.665657	.807642	.677829	1	.999136

POSITRON Z = 58, A = 138

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.469811 − 1	.458198 − 1		−.736870 − 2		.244349 − 1		.142291		.763248
1.0	.251507	.292529		−.465544 − 1		.106842		.628306		.920906
1.5	.360398	.619847		−.972849 − 1		.181790		.108306	1	.962419
2.0	.403618	.959653		−.148272		.245309		.148313	1	.978331
2.5	.419607	.129650	1	−.196983		.301307		.185051	1	.985969
3.0	.424085	.162809	1	−.243063		.352233		.219902	1	.990193
3.5	.423430	.195501	1	−.286625		.399422		.253619	1	.992767
4.0	.420415	.227831	1	−.327853		.443635		.286631	1	.994448
4.5	.416332	.259899	1	−.366917		.485328		.319198	1	.995606
5.0	.411813	.291786	1	−.403952		.524792		.351488	1	.996436
5.5	.407179	.323559	1	−.439067		.562224		.383616	1	.997052
6.0	.402593	.355273	1	−.472346		.597761		.415666	1	.997521
6.5	.398139	.386975	1	−.503856		.631500		.447699	1	.997887
7.0	.393857	.418702	1	−.533651		.663515		.479765	1	.998177
7.5	.389761	.450488	1	−.561773		.693862		.511903	1	.998411
8.0	.385856	.482361	1	−.588256		.722581		.544148	1	.998603
8.5	.382136	.514349	1	−.613125		.749704		.576528	1	.998763
9.0	.378595	.546474	1	−.636402		.775257		.609068	1	.998896
9.5	.375222	.578759	1	−.658103		.799258		.641792	1	.999009
10.0	.372007	.611222	1	−.678240		.821720		.674720	1	.999105

POSITRON Z = 59, A = 139

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.447422 − 1	.450195 − 1		−.737745 − 2		.242263 −1		.138586		.757767
1.0	.248008	.291119		−.472167 − 1		.107823		.622803		.918483
1.5	.357919	.618201		−.989037 − 1		.184180		.107760	1	.961187
2.0	.401580	.957476		−.150833		.248859		.147728	1	.977603
2.5	.417617	.129345	1	−.200421		.305836		.184382	1	.985492
3.0	.421977	.162392	1	−.247320		.357629		.219117	1	.989857
3.5	.421141	.194954	1	−.291658		.405617		.252699	1	.992518
4.0	.417930	.227139	1	−.333631		.450586		.285561	1	.994257
4.5	.413652	.259052	1	−.373419		.493008		.317970	1	.995454
5.0	.408949	.290778	1	−.411164		.533186		.350096	1	.996313
5.5	.404142	.322384	1	−.446980		.571324		.382057	1	.996950
6.0	.399397	.353928	1	−.480956		.607562		.413936	1	.997435
6.5	.394796	.385457	1	−.513164		.642005		.445797	1	.997813
7.0	.390378	.417011	1	−.543659		.674727		.477692	1	.998114
7.5	.386158	.448624	1	−.572486		.705786		.509660	1	.998356
8.0	.382136	.480325	1	−.599679		.735227		.541736	1	.998555
8.5	.378309	.512141	1	−.625268		.763082		.573949	1	.998720
9.0	.374668	.544097	1	−.649274		.789378		.606326	1	.998858
9.5	.371202	.576215	1	−.671715		.814134		.638889	1	.998975
10.0	.367900	.608514	1	−.692603		.837365		.671662	1	.999074

POSITRON Z = 60, A = 143

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.425636 − 1	.442111 − 1	−.737650 − 2	.239998 − 1	.134910	.752311
1.0	.244306	.289589	−.478245 − 1	.108721	.617066	.916038
1.5	.355095	.616298	−.100406	.186433	.107172 1	.959939
2.0	.399140	.954912	−.153202	.252212	.147088 1	.976864
2.5	.415201	.128991 1	−.203580	.310098	.183649 1	.985007
3.0	.419432	.161917 1	−.251201	.362679	.218262 1	.989516
3.5	.418412	.194340 1	−.296209	.411379	.251705 1	.992265
4.0	.415004	.226377 1	−.338814	.457009	.284419 1	.994062
4.5	.410533	.258134 1	−.379202	.500057	.316672 1	.995300
5.0	.405647	.289698 1	−.417525	.540838	.348640 1	.996188
5.5	.400672	.321141 1	−.453903	.579561	.380440 1	.996846
6.0	.395771	.352521 1	−.488430	.616375	.412161 1	.997348
6.5	.391027	.383888 1	−.521178	.651385	.443866 1	.997739
7.0	.386477	.415280 1	−.552208	.684670	.475608 1	.998049
7.5	.382136	.446735 1	−.581565	.716291	.507427 1	.998300
8.0	.378003	.478282 1	−.609287	.746292	.539360 1	.998506
8.5	.374072	.509141 1	yx635404	x774710	.571436 1	.190676
9.0	.370335	.541761 1	−.659938	.801570	.603683 1	.998819
9.5	.366779	.573742 1	−.682909	.826895	.636124 1	.990140
10x0	x363314	x605111 1	yx704320	x050611	x660703 1	x111043

POSITRON Z = 61, A = 143

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.405809 − 1	.434628 − 1	−.738612 − 2	.237926 − 1	.131454	.746883
1.0	.241208	.288374	−.485151 − 1	.109718	.611965	.913571
1.5	.353099	.615033	−.102098	.188886	.106686 1	.958675
2.0	.397617	.953290	−.155879	.255868	.146581 1	.976114
2.5	.413730	.128758 1	−.207173	.314767	.183072 1	.984514
3.0	.417835	.161586 1	−.255650	.368246	.217583 1	.989170
3.5	.416624	.193890 1	−.301469	.417774	.250902 1	.992009
4.0	.413007	.225794 1	−.344853	.464189	.283476 1	.993864
4.5	.408330	.257406 1	−.386001	.507997	.315581 1	.995143
5.0	.403249	.288818 1	−.425071	.549523	.347392 1	.996060
5.5	.398091	.320103 1	−.462190	.583986	.379032 1	.996741
6.0	.393022	.351321 1	−.497455	.626537	.410589 1	.997259
6.5	.388123	.382522 1	−.530945	.662288	.442129 1	.997663
7.0	.383431	.413747 1	−.562721	.696322	.473704 1	.997984
7.5	.378958	.445034 1	−.592832	.728700	.505357 1	.998243
8.0	.374703	.476413 1	−.621318	.759470	.537124 1	.998455
8.5	.370661	.507913 1	−.648209	.788670	.569037 1	.998631
9.0	.366819	.539560 1	−.673532	.816328	.601122 1	.998779
9.5	.363167	.571376 1	−.697305	.842467	.633404 1	.998904
10.0	.359691	.603384 1	−.719543	.867102	.665907 1	.999011

POSITRON Z = 62, A = 148

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.386098 - 1	.426855 - 1	-.738047 - 2	.235573 - 1	.127966	.741484
1.0	.237664	.286905	-.491112 - 1	.110577	.606368	.911084
1.5	.350401	.613236	-.103583	.191101	.106113 1	.957395
2.0	.395291	.950872	-.158218	.259176	.145960 1	.975353
2.5	.411415	.128423 1	-.210281	.318970	.182362 1	.984015
3.0	.415379	.161132 1	-.259453	.373216	.216758 1	.988818
3.5	.413974	.193304 1	-.305909	.423429	.249943 1	.991748
4.0	.410150	.225063 1	-.349887	.470475	.282376 1	.993663
4.5	.405273	.256525 1	-.391595	.514877	.314333 1	.994983
5.0	.400005	.287782 1	-.431201	.556969	.345995 1	.995931
5.5	.394674	.318912 1	-.468835	.596980	.377486 1	.996633
6.0	.389446	.349975 1	-.504602	.635066	.408895 1	.997169
6.5	.384402	.381023 1	-.538583	.671343	.440292 1	.997586
7.0	.379576	.412099 1	-.570841	.705896	.471729 1	.997918
7.5	.374980	.443241 1	-.601428	.738790	.503250 1	.998185
8.0	.370613	.474481 1	-.630386	.770075	.534892 1	.998405
8.5	.366466	.505848 1	-.657748	.799789	.566687 1	.998586
9.0	.362528	.537369 1	-.683539	.827963	.598664 1	.998739
9.5	.358787	.569068 1	-.707779	.854619	.630847 1	.998868
10.0	.355228	.600968 1	-.730486	.879774	.663262 1	.998978

POSITRON Z = 63, A = 149

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.368186 − 1	.419674	− 1	−.738552	− 2	.233424	− 1	.124692		.736115
1.0	.234720	.285756		−.497924	− 1	.111539		.601409		.908577
1.5	.348539	.612089		−.105264		.193524		.105644	1	.956099
2.0	.393894	.949415		−.160873		.262799		.145475	1	.974582
2.5	.410060	.128210	1	−.213832		.323593		.181813	1	.983508
3.0	.413885	.160826	1	−.263831		.378716		.216111	1	.988460
3.5	.412277	.192883		−.311064		.429731		.249179	1	.991483
4.0	.408234	.224514	1	−.355784		.477531		.281479	1	.993459
4.5	.403143	.255838	1	−.398209		.522657		.313295	1	.994822
5.0	.397672	.286950	1	−.438516		.565457		.344810	1	.995799
5.5	.392154	.317929	1	−.476842		.606165		.376151	1	.996525
6.0	.386754	.348839	1	−.513296		.644945		.407409	1	.997077
6.5	.381551	.379733	1	−.547962		.681917		.438653	1	.997508
7.0	.376580	.410654	1	−.580909		.717170		.469938	1	.997850
7.5	.371851	.441641	1	−.612191		.750771		.501309	1	.998126
8.0	.367361	.472728	1	−.641850		.782773		.532804	1	.998353
8.5	.363100	.503944	1	−.669922		.813215		.564455	1	.998540
9.0	.359057	.535318	1	−.696434		.842129		.596292	1	.998698
9.5	.355218	.566872	1	−.721408		.869540		.628340	1	.998831
10.0	.351568	.598633	1	−.744861		.895466		.660625	1	.998945

POSITRON Z = 64, A = 154

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.350523 − 1	.412294 − 1		−.737844 − 2		.231053 − 1		.121409		.730778
1.0	.231439	.284410		−.503984 − 1		.112388		.596070		.906051
1.5	.346130	.610525		−.106781		.195753		.105107	1	.954788
2.0	.391867	.947333		−.163261		.266142		.144901	1	.973800
2.5	.408039	.127917	1	−.217000		.327843		.181159	1	.982993
3.0	.411713	.160424	1	−.267701		.383741		.215350	1	.988097
3.5	.409898	.192356	1	−.315576		.435446		.248294	1	.991214
4.0	.405640	.223851	1	−.360891		.483881		.280460	1	.993252
4.5	.400339	.255031	1	−.403879		.529603		.312137	1	.994657
5.0	.394673	.285998	1	−.444723		.572974		.343512	1	.995666
5.5	.388974	.316830	1	−.483568		.614234		.374713	1	.996414
6.0	.383409	.347594	1	−.520527		.653554		.405833	1	.996984
6.5	.378056	.378344	1	−.555688		.691059		.436945	1	.997429
7.0	.372947	.409125	1	−.589123		.726839		.468102	1	.997782
7.5	.368092	.439978	1	−.620888		.760966		.499353	1	.998067
8.0	.363486	.470936	1	−.651028		.793493		.530734	1	.998300
8.5	.359119	.502031	1	−.679579		.824463		.562281	1	.998494
9.0	.354977	.533291	1	−.706571		.853908		.594023	1	.998656
9.5	.351047	.564742	1	−.732026		.881853		.625988	1	.998794
10.0	.347313	.596407	1	−.755961		.908319		.658200	1	.998911

POSITRON Z = 65, A = 157

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.334156 - 1	.405298 - 1	-.737645 - 2	.228785 - 1	.118278	.725475
1.0	.228519	.283256	-.510507 - 1	.113289	.591114	.903507
1.5	.344213	.609350	-.108407	.198096	.104632 1	.953462
2.0	.390383	.945823	-.165823	.269658	.144407 1	.973008
2.5	.406575	.127698 1	-.220408	.332322	.180600 1	.982472
3.0	.410096	.160109 1	-.271880	.389053	.214696 1	.987729
3.5	.408068	.191927 1	-.320467	.441508	.247525 1	.990941
4.0	.403583	.223296 1	-.366453	.490639	.279565 1	.993042
4.5	.398063	.254343 1	-.410081	.537024	.311109 1	.994490
5.0	.392190	.285169 1	-.451545	.581034	.342347 1	.995530
5.5	.386303	.315860 1	-.490996	.622921	.373410 1	.996302
6.0	.380564	.346481 1	-.528551	.662861	.404393 1	.996890
6.5	.375052	.377088 1	-.564304	.700982	.435370 1	.997348
7.0	.369798	.407730 1	-.598328	.737380	.466396 1	.997712
7.5	.364810	.438445 1	-.630684	.772128	.497520 1	.998006
8.0	.360082	.469271 1	-.661418	.805282	.528781 1	.998247
8.5	.355602	.500239 1	-.690568	.336886	.560213 1	.998447
9.0	.351357	.531377 1	-.718165	.866975	.591849 1	.998614
9.5	.347330	.562714 1	-.744233	.895574	.623715 1	.998756
10.0	.343507	.594273 1	-.768790	.922705	.655838 1	.998877

POSITRON Z = 66, A = 162

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.318339 - 1	.398294 - 1	-.736831 - 2	.226410 - 1	.115190	.720205
1.0	.225492	.282031	-.516686 - 1	.114132	.586029	.900945
1.5	.342090	.608020	-.109961	.200345	.104131 1	.952121
2.0	.388653	.944078	-.168266	.273044	.143879 1	.972206
2.5	.404847	.127448 1	-.223645	.336630	.180002 1	.981943
3.0	.408205	.159759 1	-.275827	.394146	.214000 1	.987356
3.5	.405959	.191459 1	-.325062	.447299	.246714 1	.990664
4.0	.401246	.222700 1	-.371650	.497071	.278629 1	.992829
4.5	.395507	.253612 1	-.415846	.544059	.310043 1	.994321
5.0	.389430	.284301 1	-.457853	.588647	.341150 1	.995392
5.5	.383355	.314853 1	-.497829	.631095	.372083 1	.996188
6.0	.377445	.345337 1	-.535896	.671584	.402940 1	.996794
6.5	.371778	.375811 1	-.572152	.710249	.433794 1	.997266
7.0	.366381	.406323 1	-.606674	.747187	.464705 1	.997641
7.5	.361263	.436915 1	-.639524	.782476	.495721 1	.997944
8.0	.356416	.467624 1	-.670752	.816173	.526882 1	.998193
8.5	.351828	.498483 1	-.700397	.848324	.558224 1	.998398
9.0	.347482	.529522 1	-.728491	.878965	.589781 1	.998571
9.5	.343362	.560769 1	-.755059	.908124	.621579 1	.998717
10.0	.339453	.592249 1	-.780121	.935822	.653648 1	.998842

POSITRON Z = 67, A = 163

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.304004 − 1	.391853 − 1	−.737092 − 2	.224250 − 1	.112298	.714971
1.0	.223050	.281132	−.523755 − 1	.115086	.581582	.898367
1.5	.340812	.607360	−.111718	.202821	.103735 1	.950766
2.0	.387871	.943325	−.171036	.276766	.143489 1	.971393
2.5	.404097	.127325 1	−.227336	.341382	.179569 1	.981407
3.0	.407294	.159559 1	−.280359	.399791	.213488 1	.986978
3.5	.404819	.191163 1	−.330378	.453755	.246102 1	.990383
4.0	.399862	.222292 1	−.377710	.504286	.277903 1	.992612
4.5	.393886	.253082 1	−.422623	.552002	.309194 1	.994149
5.0	.387588	.283643 1	−.465329	.597299	.340172 1	.995253
5.5	.381308	.314062 1	−.505993	.640446	.370974 1	.996072
6.0	.375212	.344411 1	−.544745	.681632	.401699 1	.996696
6.5	.369373	.374749 1	−.581685	.720995	.432422 1	.997183
7.0	.363821	.405126 1	−.616895	.758639	.463204 1	.997569
7.5	.358561	.435584 1	−.650440	.794641	.494093 1	.997882
8.0	.353583	.466162 1	−.682371	.829064	.525132 1	.998138
8.5	.348874	.496894 1	−.712730	.861955	.556357 1	.998350
9.0	.344417	.527810 1	−.741551	.893351	.587802 1	.998528
9.5	.340195	.558939 1	−.768861	.923283	.619495 1	.998678
10.0	.336191	.590307 1	−.794680	.951772	.651466 1	.998807

POSITRON Z = 68, A = 166

p	F_0	f_1		g_1	f_{-1}	g_{-1}		Sin Δ
.5	.290125 - 1	.385396 - 1		-.736752 - 2	.221989 - 1	.109444		.709773
1.0	.220497	.280163		-.530489 - 1	.115984	.577004		.895772
1.5	.339327	.606546		-.113406	.205207	.103314	1	.949395
2.0	.386842	.942338		-.173691	.280364	.143066	1	.970571
2.5	.403082	.127172	1	-.230858	.345967	.179096	1	.980864
3.0	.406108	.159324	1	-.284665	.405225	.212934	1	.986594
3.5	.403399	.190827	1	-.335405	.459949	.245447	1	.990098
4.0	.398196	.221842	1	-.383413	.511185	.277135	1	.992392
4.5	.391983	.252511	1	-.428971	.559570	.308307	1	.993975
5.0	.385464	.282945	1	-.472300	.605514	.339163	1	.995111
5.5	.378983	.313235	1	-.513573	.649295	.369843	1	.995954
6.0	.372702	.343456	1	-.552925	.691110	.400446	1	.996597
6.5	.366695	.373666	1	-.590463	.731100	.431052	1	.997098
7.0	.360990	.403919	1	-.626269	.769373	.461720	1	.997497
7.5	.355590	.434258	1	-.660413	.806011	.492502	1	.997818
8.0	.350484	.464721	1	-.692949	.841078	.523440	1	.998082
8.5	.345658	.495345	1	-.723920	.874623	.554573	1	.998300
9.0	.341093	.526160	1	-.753361	.906685	.585935	1	.998483
9.5	.336771	.557196	1	-.781302	.937296	.617555	1	.998639
10.0	.332675	.588482	1	-.807763	.966480	.649464	1	.998771

POSITRON   Z = 69, A = 167

p	F_o	f_1		g_1		f_{-1}	g_1		Sin Δ
.5	.277285 - 1	.379302 - 1		-.736945 - 2		.219844 - 1	.106728		.704612
1.0	.218298	.279392		-.537732 - 1		.116943	.572813		.893161
1.5	.338351	.606143		-.115212		.207725	.102957	1	.948011
2.0	.386383	.941958		-.176535		.284157	.142727	1	.969738
2.5	.402652	.127097	1	-.234639		.350809	.178723	1	.980313
3.0	.405503	.159182	1	-.289298		.410973	.212493	1	.986205
3.5	.402549	.190596	1	-.340828		.466516	.244915	1	.989809
4.0	.397088	.221508	1	-.389584		.518516	.276499	1	.992170
4.5	.390625	.252064	1	-.435860		.567633	.307558	1	.993798
5.0	.383873	.282378	1	-.479890		.614290	.338295	1	.994967
5.5	.377177	.312545	1	-.521852		.658774	.368854	1	.995835
6.0	.370700	.342640	1	-.561890		.701289	.399337	1	.996497
6.5	.364516	.372725	1	-.600112		.741983	.429822	1	.997013
7.0	.358648	.402854	1	-.636609		.780966	.460374	1	.997423
7.5	.353100	.433070	1	-.671449		.818325	.491042	1	.997754
8.0	.347859	.463415	1	-.704691		.854125	.521873	1	.998025
8.5	.342903	.493924	1	-.736381		.888419	.552903	1	.998250
9.0	.338229	.524631	1	-.766555		.921248	.584169	1	.998439
9.5	.333801	.555565	1	-.795244		.952644	.615701	1	.998598
10.0	.329607	.586755	1	-.822471		.982633	.647531	1	.998735

POSITRON Z = 70, A = 172

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.264545 − 1	.372990 − 1	−.735981 − 2	.217491 − 1	.103994	.699489
1.0	.215743	.278407	−.544207 − 1	.117783	.568217	.890535
1.5	.336787	.605283	−.116851	.210036	.102526 1	.946613
2.0	.385243	.940895	−.179108	.287656	.142291 1	.968895
2.5	.401503	.126934 1	−.238034	.355265	.178238 1	.979756
3.0	.404166	.158936 1	−.293424	.416238	.211928 1	.985811
3.5	.400967	.190249 1	−.345617	.472497	.244254 1	.989516
4.0	.395251	.221050 1	−.394985	.525155	.275731 1	.991944
4.5	.388545	.251488 1	−.441839	.574889	.306679 1	.993618
5.0	.381569	.281682 1	−.486421	.622139	.337307 1	.994822
5.5	.374668	.311730 1	−.528920	.667202	.367757 1	.995714
6.0	.368006	.341708 1	−.569482	.710286	.398136 1	.996395
6.5	.361654	.371681 1	−.608222	.751546	.428524 1	.996926
7.0	.355634	.401702 1	−.645234	.791097	.458986 1	.997348
7.5	.349947	.431820 1	−.680590	.829027	.489575 1	.997688
8.0	.344579	.462074 1	−.714351	.865405	.520336 1	.997968
8.5	.339513	.492503 1	−.746563	.900286	.551310 1	.998199
9.0	.334727	.523140 1	−.777267	.933712	.582531 1	.998393
9.5	.330203	.554017 1	−.806493	.965717	.614034 1	.998557
10.0	.325918	.585163 1	−.834266	.996329	.645850 1	.998698

POSITRON   Z = 71, A = 173

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.253046 − 1	.367226 − 1	−.736128 − 2	.215368 − 1	.101442	.694405
1.0	.213776	.277762	−.551640 − 1	.118749	.564274	.887896
1.5	.336105	.605132	−.118710	.212599	.102206 1	.945200
2.0	.385100	.940883	−.182030	.291526	.142001 1	.968043
2.5	.401384	.126905 1	−.241911	.360204	.177925 1	.979191
3.0	.403859	.158849 1	−.298164	.422098	.211557 1	.985411
3.5	.400398	.190083 1	−.351155	.479187	.243802 1	.989219
4.0	.394409	.220790 1	−.401277	.532617	.275185 1	.991715
4.5	.387438	.251124 1	−.448854	.583091	.306030 1	.993437
5.0	.380216	.281208 1	−.494140	.631060	.336549 1	.994674
5.5	.373091	.311142 1	−.537332	.676833	.366890 1	.995592
6.0	.366225	.341005 1	−.578583	.720626	.397160 1	.996292
6.5	.359686	.370863 1	−.618014	.762599	.427442 1	.996838
7.0	.353498	.400772 1	−.655721	.802871	.457801 1	.997272
7.5	.347656	.430780 1	−.691781	.841534	.488291 1	.997622
8.0	.342148	.460930 1	−.726257	.878660	.518960 1	.997909
8.5	.336954	.491259 1	−.759198	.914305	.549847 1	.998147
9.0	.332050	.521803 1	−.790646	.948516	.580992 1	.998347
9.5	.327417	.552594 1	−.820633	.981327	.612426 1	.998516
10.0	.323032	.583663 1	−.849187	.101277 1	.644184 1	.998660

$$\text{POSITRON} \quad Z = 72, \ A = 177$$

p	F_o	f_1		g_1	f_{-1}		g_{-1}		Sin Δ
.5	.241746 − 1	.361334	− 1	−.735414 − 2	.213096	− 1	.988958	− 1	.689361
1.0	.211566	.276968		−.558517 − 1	.119625		.560052		.885242
1.5	.335009	.604662		−.120449	.215010		.101835	1	.943775
2.0	.384474	.940391		−.184757	.295183		.141644	1	.967180
2.5	.400752	.126815	1	−.245510	.364865		.177534	1	.978620
3.0	.403027	.158690	1	−.302539	.427610		.211101	1	.985007
3.5	.399302	.189836	1	−.356235	.485454		.243262	1	.988919
4.0	.393040	.220444	1	−.407012	.539581		.274550	1	.991483
4.5	.385810	.250671	1	−.455210	.590712		.305296	1	.993252
5.0	.378348	.280647	1	−.501094	.639317		.335715	1	.994524
5.5	.371004	.310472	1	−.544869	.685713		.365958	1	.995468
6.0	.363940	.340229	1	−.586694	.730124		.396135	1	.996188
6.5	.357223	.369984	1	−.626696	.772714		.426329	1	.996749
7.0	.350873	.399797	1	−.664975	.813609		.456608	1	.997195
7.5	.344884	.429715	1	−.701611	.852903		.487029	1	.997555
8.0	.339243	.459784	1	−.736669	.890671		.517638	1	.997850
8.5	.333926	.490043	1	−.770202	.926971		.548479	1	.998095
9.0	.328911	.520527	1	−.802253	.961852		.579589	1	.998300
9.5	.324174	.551271	1	−.832855	.995351		.611005	1	.998474
10.0	.319695	.582306	1	−.862039	.102750	1	.642759	1	.998622

POSITRON Z = 73, A = 178

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.231442 - 1	.355885 - 1		-.735547 - 2		.211006 - 1		.964998 - 1		.684357
1.0	.209826	.276451		-.566170 - 1		.120603		.556356		.882576
1.5	.334628	.604771		-.122366		.217628		.101552	1	.942335
2.0	.384658	.940759		-.187768		.299143		.141404	1	.966308
2.5	.400956	.126836	1	-.249496		.369920		.177284	1	.978041
3.0	.403026	.158662	1	-.307403		.433602		.210803	1	.984597
3.5	.399022	.189738	1	-.361908		.492289		.242893	1	.988614
4.0	.392468	.220260	1	-.413446		.547200		.274098	1	.991248
4.5	.384958	.250393	1	-.462373		.599081		.304751	1	.993066
5.0	.377237	.280269	1	-.508967		.648416		.335075	1	.994372
5.5	.369657	.309991	1	-.553442		.695532		.365220	1	.995342
6.0	.362378	.339643	1	-.595964		.740664		.395301	1	.996082
6.5	.355467	.369297	1	-.636664		.783981		.425402	1	.996658
7.0	.348940	.399010	1	-.675647		.825611		.455594	1	.997117
7.5	.342792	.428833	1	-.712997		.865655		.485932	1	.997487
8.0	.337004	.458812	1	-.748782		.904189		.516466	1	.997790
8.5	.331554	.488987	1	-.783058		.941276		.547240	1	.998042
9.0	.326417	.519396	1	-.815868		.976965		.578294	1	.998253
9.5	.321568	.550073	1	-.847251		.101130	1	.609663	1	.998431
10.0	.316986	.581052	1	-.877235		.104430	1	.641383	1	.998584

POSITRON $Z = 74$, $A = 182$

p	F_o	f_1	g_1	f_{-1}	g_{-1}	$\sin \Delta$
.5	.221294 − 1	.350302 − 1	−.734825 − 2	.208768 − 1	.941055 − 1	.679393
1.0	.207836	.275778	−.573259 − 1	.121489	.552373	.879897
1.5	.333820	.604549	−.124163	.220090	.101217 1	.940883
2.0	.384341	.940630	−.190582	.302886	.141096 1	.965426
2.5	.400629	.126792 1	−.253202	.374691	.176952 1	.977456
3.0	.402482	.158559 1	−.311899	.439244	.210417 1	.984182
3.5	.398196	.189556 1	−.367121	.498702	.242434 1	.988305
4.0	.391353	.219988 1	−.419325	.554323	.273555 1	.991009
4.5	.383568	.250025 1	−.468883	.606876	.304121 1	.992876
5.0	.375594	.279802 1	−.516085	.656861	.334357 1	.994218
5.5	.367785	.309427 1	−.561153	.704617	.364418 1	.995214
6.0	.360299	.338985 1	−.604261	.750385	.394419 1	.995974
6.5	.353201	.368549 1	−.645547	.794340	.424449 1	.996567
7.0	.346506	.398179 1	−.685118	.836616	.454578 1	.997037
7.5	.340205	.427929 1	−.723062	.877317	.484864 1	.997418
8.0	.334279	.457844 1	−.759450	.916522	.515359 1	.997729
8.5	.328702	.487967 1	−.794341	.954297	.546108 1	.997988
9.0	.323450	.518336 1	−.827780	.990692	.577152 1	.998205
9.5	.318495	.548988 1	−.859807	.102575 1	.608528 1	.998388
10.0	.313815	.579957 1	−.890453	.105951 1	.640272 1	.998545

POSITRON Z = 75, A = 185

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.211806 – 1	.344963 – 1	–.734395 – 2	.206607 – 1	.918085 – 1	.674470
1.0	.206076	.275241	–.580691 – 1	.122414	.548646	.877207
1.5	.333351	.604608	–.126041	.222644	.100924 1	.939418
2.0	.384405	.940917	–.193524	.306766	.140844 1	.964535
2.5	.400688	.126802 1	–.257079	.379640	.176689 1	.976864
3.0	.402317	.158519 1	–.316608	.445100	.210109 1	.983762
3.5	.397738	.189447 1	–.372586	.505365	.242061 1	.987993
4.0	.390592	.219798 1	–.425494	.561731	.273106 1	.990768
4.5	.382520	.249746 1	–.475723	.614993	.303591 1	.992685
5.0	.374282	.279431 1	–.523575	.665666	.333745 1	.994062
5.5	.366233	.308964 1	–.569280	.714101	.363727 1	.995085
6.0	.358531	.338433 1	–.613021	.760546	.393654 1	.995865
6.5	.351238	.367912 1	–.654940	.805185	.423616 1	.996474
7.0	.344366	.397465 1	–.695150	.848154	.453686 1	.996957
7.5	.337906	.427144 1	–.733742	.889562	.483924 1	.997348
8.0	.331835	.456999 1	–.770790	.929491	.514382 1	.997668
8.5	.326127	.487072 1	–.806355	.968011	.545108 1	.997933
9.0	.320754	.517404 1	–.840486	.100517 1	.576142 1	.998156
9.5	.315690	.548033 1	–.873224	.104102 1	.607526 1	.998345
10.0	.310909	.578993 1	–.904602	.107560 1	.639296 1	.998506

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POSITRON Z = 76, A = 188

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.202818 − 1	.339771	− 1	−.733978	− 2	.204467	− 1	.895821	− 1	.669589
1.0	.204424	.274765		−.588248	− 1	.123347		.545038		.874505
1.5	.333030	.604796		−.127953		.225229		.100650	1	.937940
2.0	.384631	.941394		−.196516		.310697		.140617	1	.963634
2.5	.400906	.126836	1	−.261018		.384656		.176458	1	.976265
3.0	.402302	.158509	1	−.321387		.451034		.209839	1	.983337
3.5	.397418	.189372	1	−.378128		.512115		.241732	1	.987676
4.0	.389960	.219646	1	−.431749		.569237		.272707	1	.990524
4.5	.381592	.249511	1	−.482656		.623217		.303117	1	.992490
5.0	.373083	.279110	1	−.531163		.674589		.333197	1	.993904
5.5	.364788	.308558	1	−.577514		.723714		.363107	1	.994954
6.0	.356864	.337945	1	−.621896		.770850		.392967	1	.995755
6.5	.349372	.367347	1	−.664458		.816185		.422871	1	.996380
7.0	.342320	.396830	1	−.705317		.859863		.452892	1	.996876
7.5	.335698	.426448	1	−.744569		.901995		.483092	1	.997277
8.0	.329479	.456253	1	−.782291		.942668		.513525	1	.997605
8.5	.323637	.486287	1	−.818546		.981953		.544240	1	.997878
9.0	.318142	.516594	1	−.853386		.101991	1	.575281	1	.998107
9.5	.312966	547212	1	−.886854		.105657	1	.606687	1	.998300
10.0	.308083	.578179	1	−.918985		.109199	1	.638500	1	.998466

POSITRON Z = 77, A = 191

p	F_o	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.194302 − 1	.334722 − 1	−.733580 − 2	.202351 − 1	.874244 − 1	.664750
1.0	.202879	.274353	−.595937 − 1	.124289	.541550	.871793
1.5	.332859	.605115	−.129899	.227849	.100395 1	.936449
2.0	.385022	.942064	−.199560	.314684	.140416 1	.962724
2.5	.401285	.126895 1	−.265022	.389743	.176258 1	.975659
3.0	.402438	.158529 1	−.326241	.457051	.209607 1	.982907
3.5	.397240	.189333 1	−.383754	.518961	.241447 1	.987356
4.0	.389459	.219535 1	−.438094	.576848	.272358 1	.990277
4.5	.380787	.249322 1	−.489686	.631558	.302701 1	.992294
5.0	.371998	.278842 1	−.538858	.683640	.332713 1	.993744
5.5	.363450	.308210 1	−.585863	.733468	.362560 1	.994822
6.0	.355300	.337522 1	−.630896	.781308	.392363 1	.995643
6.5	.347603	.366856 1	−.674111	.827356	.422218 1	.996284
7.0	.340368	.396278 1	−.715632	.871760	.452200 1	.996794
7.5	.333579	.425845 1	−.755558	.914636	.482374 1	.997205
8.0	.327210	.455610 1	−.793970	.956074	.512796 1	.997542
8.5	.321232	.485617 1	−.830933	.996149	.543514 1	.997822
9.0	.315612	.515912 1	−.866502	.103492 1	.574575 1	.998057
9.5	.310323	.546533 1	−.900721	.107243 1	.606022 1	.998255
10.0	.305335	.577521 1	−.933629	.110873 1	.637895 1	.998425

POSITRON Z = 78, A = 192

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.186461 − 1	.330004 − 1		−.733784 − 2		.200372 − 1		.853794 − 1		.659953
1.0	.201689	.274158		−.604250 − 1		.125313		.538461		.869071
1.5	.333250	.605896		−.131991		.230639		.100209	1	.934946
2.0	.386053	.943418		−.202832		.318923		.140308	1	.961805
2.5	.402321	.127041	1	−.269332		.395152		.176170	1	.975046
3.0	.403222	.158653	1	−.331475		.463457		.209501	1	.982472
3.5	.397691	.189412	1	−.389835		.526259		.241300	1	.987032
4.0	.389568	.219555	1	−.444968		.584975		.272158	1	.990026
4.5	.380570	.249274	1	−.497320		.640478		.302441	1	.992095
5.0	.371483	.278722	1	−.547233		.693336		.332391	1	.993582
5.5	.362665	.308019	1	−.594970		.743935		.362178	1	.994687
6.0	.354271	.337261	1	−.640735		.792550		.391926	1	.995530
6.5	.346355	.366529	1	−.684689		.839385		.421732	1	.996188
7.0	.338923	.395892	1	−.726960		.884592		.451674	1	.996710
7.5	.331956	.425407	1	−.767651		.928293		.481818	1	.997132
8.0	.325426	.455130	1	−.806848		.970581		.512221	1	.997478
8.5	.319301	.485106	1	−.844618		.101154	1	.542935	1	.997765
9.0	.313548	.515382	1	−.881021		.105122	1	.574007	1	.998006
9.5	.308136	.545999	1	−.916102		.108968	1	.605481	1	.998210
10.0	.303036	.576997	1	−.949901		.112696	1	.637400	1	.998384

POSITRON Z = 79, A = 195

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.178807 - 1	.325232	- 1	-.733443	- 2	.198308	- 1	.833526	- 1	.655198
1.0	.200359	.273874		-.612230	- 1	.126278		.535213		.866340
1.5	.333391	.606487		-.134013		.233337		.999930		.933432
2.0	.386787	.944490		-.205991		.323035		.140160	1	.960876
2.5	.403036	.127152	1	-.273480		.400400		.176038	1	.974426
3.0	.403674	.158735	1	-.336495		.469665		.209348	1	.982031
3.5	.397804	.189445	1	-.395645		.533320		.241108	1	.986704
4.0	.389337	.219528	1	-.451515		.592826		.271916	1	.989773
4.5	.380014	.249183	1	-.504570		.649084		.302147	1	.991893
5.0	.370631	.278564	1	-.555166		.702679		.332046	1	.993418
5.5	.361546	.307797	1	-.603577		.754010		.361787	1	.994551
6.0	.352912	.336980	1	-.650016		.803363		.391497	1	.995416
6.5	.344782	.366197	1	-.694649		.850946		.421275	1	.996090
7.0	.337157	.395517	1	-.737611		.896920		.451203	1	.996626
7.5	.330016	.425003	1	-.779008		.941410		.481346	1	.997059
8.0	.323330	.454709	1	-.818930		.984513		.511766	1	.997413
8.5	.317062	.484685	1	-.857449		.102631	1	.542515	1	.997708
9.0	.311180	.514976	1	-.894624		.106687	1	.573642	1	.997955
9.5	.305651	.545628	1	-.930506		.110624	1	.605193	1	.998164
10.0	.300443	.576682	1	-.965137		.114448	1	.637214	1	.998342

POSITRON Z = 80, A = 199

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.171445 − 1	.320500	− 1	−.732846	− 2	.196216	− 1	.813663	− 1	.650486
1.0	.199010	.273576		−.620113	− 1	.127218		.531943		.863600
1.5	.333479	.607047		−.136019		.236005		.997711		.931905
2.0	.387451	.945514		−.209120		.327114		.140006	1	.959939
2.5	.403667	.127256	1	−.277581		.405607		.175900	1	.973800
3.0	.404029	.158811	1	−.341449		.475822		.209193	1	.981586
3.5	.397812	.189475	1	−.401369		.540320		.240917	1	.986372
4.0	.388993	.219501	1	−.457955		.600607		.271683	1	.989516
4.5	.379342	.249094	1	−.511691		.657610		.301869	1	.991689
5.0	.369659	.278415	1	−.562949		.711934		.331728	1	.993252
5.5	.360306	.307592	1	−.612014		.763991		.361435	1	.994414
6.0	.351432	.336727	1	−.659106		.814076		.391123	1	.995300
6.5	.343087	.365906	1	−.704401		.862405		.420892	1	.995991
7.0	.335269	.395200	1	−.748036		.909145		.450825	1	.996540
7.5	.327956	.424675	1	−.790125		.954425		.480993	1	.996984
8.0	.321114	.454385	1	−.830759		.998348		.511456	1	.997348
8.5	.314706	.484383	1	−.870013		.104100	1	.542270	1	.997650
9.0	.308696	.514718	1	−.907952		.108244	1	.573487	1	.997903
9.5	.303050	.545436	1	−.944628		.112274	1	.605155	1	.998117
10.0	.297737	.576581	1	−.980084		.116194	1	.637321	1	.998300

POSITRON Z = 81, A = 201

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.164678 - 1	.316090	- 1	-.732876	- 2	.194266	- 1	.794862	- 1	.645817
1.0	.198019	.273501		-.628661	- 1	.128246		.529078		.860852
1.5	.334150	.608085		-.138181		.238859		.996204		.930367
2.0	.388781	.947250		-.212493		.331464		.139948	1	.958992
2.5	.404980	.127453	1	-.282006		.411161		.175878	1	.973167
3.0	.405056	.158996	1	-.346804		.482396		.209170	1	.981136
3.5	.398470	.189628	1	-.407571		.547805		.240872	1	.986037
4.0	.389277	.219610	1	-.464949		.608939		.271605	1	.989257
4.5	.379274	.249153	1	-.519443		.666755		.301756	1	.991483
5.0	.369271	.278424	1	-.571442		.721878		.331581	1	.993084
5.5	.359629	.307553	1	-.621243		.774733		.361261	1	.994274
6.0	.350497	.336646	1	-.669074		.825624		.390930	1	.995182
6.5	.341921	.365791	1	-.715118		.874778		.420691	1	.995890
7.0	.333896	.395063	1	-.759518		.922366		.450631	1	.996454
7.5	.326396	.424527	1	-.802393		.968522		.480821	1	.996909
8.0	.319386	.454242	1	-.843838		.101335	1	.511324	1	.997281
8.5	.312827	.484261	1	-.883933		.105695	1	.542199	1	.997591
9.0	.306679	.514636	1	-.922744		.109939	1	.573499	1	.997850
9.5	.300908	.545414	1	-.960328		.114072	1	.605274	1	.998070
10.0	.295479	.576642	1	-.996731		.118100	1	.637575	1	.998258

POSITRON Z = 82, A = 203

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.158264 - 1	.311810	- 1	-.732958	- 2	.192347	- 1	.776652	- 1	.641191
1.0	.197137	.273495		-.637390	- 1	.129291		.526337		.858097
1.5	.334991	.609272		-.140388		.241764		.994908		.928817
2.0	.390303	.949208		-.215935		.335895		.139920	1	.958037
2.5	.406480	.127677	1	-.286520		.416818		.175893	1	.972528
3.0	.406256	.159217	1	-.352263		.489094		.209192	1	.980681
3.5	.399287	.189823	1	-.413890		.555431		.240880	1	.985697
4.0	.389706	.219767	1	-.472072		.617431		.271589	1	.988994
4.5	.379339	.249268	1	-.527339		.676080		.301714	1	.991274
5.0	.369005	.278497	1	-.580094		.732021		.331517	1	.992914
5.5	.359066	.307587	1	-.630645		.785697		.361181	1	.994133
6.0	.349668	.336649	1	-.679233		.837421		.390843	1	.995063
6.5	.340854	.365772	1	-.726045		.887426		.420611	1	.995789
7.0	.332617	.395033	1	-.771233		.935892		.450573	1	.996366
7.5	.324927	.424501	1	-.814919		.982959		.480802	1	.996832
8.0	.317745	.454236	1	-.857203		.102874	1	.511365	1	.997214
8.5	.311030	.484294	1	-.898169		.107333	1	.542321	1	.997531
9.0	.304742	.514728	1	-.937887		.111679	1	.573727	1	.997797
9.5	.298842	.545588	1	-.976416		.115921	1	.605636	1	.998022
10.0	.293297	.576923	1	-.101381	1	.120062	1	.638099	1	.998214

POSITRON Z = 83, A = 206

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.152085 − 1	.307562	− 1	−.732801	− 2	.190404	− 1	.758797	− 1	.636608
1.0	.196234	.273475		−.646041	− 1	.130315		.523575		.855334
1.5	.335785	.610432		−.142585		.244648		.993564		.927257
2.0	.391761	.951128		−.219356		.340304		.139887	1	.957072
2.5	.407901	.127898	1	−.290999		.422452		.175906	1	.971882
3.0	.407363	.159433	1	−.357671		.495763		.209215	1	.980221
3.5	.400001	.190016	1	−.420140		.563025		.240896	1	.985354
4.0	.390024	.219928	1	−.479109		.625886		.271590	1	.988729
4.5	.379287	.249393	1	−.535132		.685365		.301699	1	.991063
5.0	.368618	.278587	1	−.588627		.742126		.331492	1	.992742
5.5	.358379	.307650	1	−.639917		.796625		.361155	1	.993991
6.0	.348715	.336693	1	−.689249		.849186		.390830	1	.994943
6.5	.339663	.365810	1	−.736821		.900053		.420627	1	.995686
7.0	.331213	.395080	1	−.782789		.949410		.450636	1	.996277
7.5	.323332	.424574	1	−.827281		.997403		.480934	1	.996755
8.0	.315979	.454355	1	−.870403		.104415	1	.511590	1	.997146
8.5	.309110	.484481	1	−.912242		.108975	1	.542665	1	.997471
9.0	.302682	.515007	1	−.952872		.113428	1	.574220	1	.997743
9.5	.296656	.545987	1	−.992355		.117781	1	.606310	1	.997974
10.0	.290996	.577471	1	−.103075	1	.122041	1	.638989	1	.998171

POSITRON   Z = 84, A = 210

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.146129 − 1	.303344 − 1		−.732406 − 2		.188438 − 1		.741290 − 1		.632068
1.0	.195309	.273440		−.654611 − 1		.131318		.520790		.852565
1.5	.336525	.611563		−.144769		.247510		.992170		.925685
2.0	.393148	.953007		−.222756		.344694		.139850	1	.956099
2.5	.409234	.128114	1	−.295443		.428064		.175917	1	.971230
3.0	.408369	.159647	1	−.363029		.502407		.209241	1	.979756
3.5	.400603	.190209	1	−.426324		.570592		.240920	1	.985007
4.0	.390222	.220092	1	−.486066		.634316		.271608	1	.988460
4.5	.379111	.249528	1	−.542831		.694628		.301715	1	.990849
5.0	.368103	.278699	1	−.597056		.752214		.331512	1	.992568
5.5	.357563	.307746	1	−.649074		.807544		.361193	1	.993846
6.0	.347630	.336785	1	−.699145		.860956		.390902	1	.994822
6.5	.338339	.365914	1	−.747473		.912700		.420752	1	.995582
7.0	.329677	.395214	1	−.794222		.962970		.450837	1	.996188
7.5	.321607	.424759	1	−.839525		.101192	1	.481237	1	.996676
8.0	.314084	.454614	1	−.883492		.105966	1	.512022	1	.997077
8.5	.307062	.484842	1	−.926215		.110631	1	.543260	1	.997410
9.0	.300496	.515498	1	−.967772		.115195	1	.575011	1	.997688
9.5	.294345	.546640	1	−.100823	1	.119665	1	.607335	1	.997925
10.0	.288571	.578321	1	−.104765	1	.124048	1	.640292	1	.998126

POSITRON Z = 85, A = 211

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.140770 − 1	.299535	− 1	−.732976	− 2	.186677	− 1	.724976	− 1	.627571
1.0	.194886	.273727		−.664198	− 1	.132460		.518572		.849790
1.5	.338121	.613391		−.147189		.250661		.991801		.924102
2.0	.395527	.955924		−.226522		.349501		.139951	1	.955117
2.5	.411585	.128464	1	−.300376		.434207		.176095	1	.970571
3.0	.410376	.160018	1	−.368993		.509688		.209457	1	.979286
3.5	.402173	.190581	1	−.433229		.578896		.241153	1	.984656
4.0	.391352	.220454	1	−.493857		.643579		.271849	1	.988189
4.5	.379830	.249876	1	−.551478		.704821		.301963	1	.990633
5.0	.368450	.279034	1	−.606547		.763331		.331772	1	.992392
5.5	.357577	.308074	1	−.659411		.319595		.361476	1	.993700
6.0	.347347	.337117	1	−.710342		.873962		.391220	1	.994698
6.5	.337793	.366261	1	−.759550		.926692		.421122	1	.995477
7.0	.328895	.395592	1	−.807208		.977986		.451278	1	.996097
7.5	.320614	.425186	1	−.853454		.102800	1	.481771	1	.996597
8.0	.312902	.455111	1	−.898404		.107687	1	.512676	1	.997007
8.5	.305709	.485430	1	−.942155		.112470	1	.544060	1	.997348
9.0	.298989	.516205	1	−.984790		.117158	1	.575990	1	.997633
9.5	.292698	.547494	1	−.102638	1	.121759	1	.608527	1	.997875
10.0	.286796	.579355	1	−.106699	1	.126279	1	.641734	1	.998082

POSITRON Z = 86, A = 212

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.135692 - 1	.295848	- 1	-.733630	- 2	.184954	- 1	.709191	- 1	.623117
1.0	.194580	.274091		-.674019	- 1	.133628		.516489		.847010
1.5	.339919	.615391		-.149668		.253883		.991678		.922510
2.0	.398133	.959103		-.230379		.354418		.140088	1	.954127
2.5	.414158	.128847	1	-.305425		.440493		.176319	1	.969905
3.0	.412587	.160432	1	-.375094		.517141		.209729	1	.978811
3.5	.403928	.191004	1	-.440292		.587399		.241453	1	.984301
4.0	.392650	.220876	1	-.501827		.653071		.272169	1	.987914
4.5	.380701	.250294	1	-.560325		.715275		.302303	1	.990414
5.0	.368936	.279451	1	-.616262		.774742		.332140	1	.992214
5.5	.357718	.308497	1	-.669999		.831977		.361881	1	.993553
6.0	.347182	.337557	1	-.721818		.887340		.391679	1	.994574
6.5	.337355	.366733	1	-.771940		.941101		.421653	1	.995371
7.0	.328215	.396113	1	-.820543		.993469		.451903	1	.996005
7.5	.319716	.425776	1	-.867774		.104461	1	.482515	1	.996517
8.0	.311810	.455793	1	-.913753		.109466	1	.513567	1	.996937
8.5	.304442	.486230	1	-.958584		.114374	1	.545130	1	.997285
9.0	.297563	.517152	1	-.100235	1	.119193	1	.577272	1	.997578
9.5	.291129	.548619	1	-.104514	1	.123933	1	.610060	1	.997825
10.0	.285097	.580694	1	-.108700	1	.128601	1	.643561	1	.998036

POSITRON Z = 87, A = 221

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.130151	− 1	.291517	− 1	−.731938	− 2	.182813	− 1	.692242	− 1	.618706
1.0	.193310		.273834		−.681792	− 1	.134486		.513340		.844224
1.5	.340019		.616057		−.151693		.256530		.989603		.920906
2.0	.398740		.960308		−.233524		.358540		.139968	1	.953128
2.5	.414636		.128982	1	−.309511		.445789		.176245	1	.969233
3.0	.412697		.160558	1	−.379992		.523429		.209681	1	.978331
3.5	.403612		.191113	1	−.445919		.594577		.241426	1	.983943
4.0	.391923		.220970	1	−.508136		.661091		.272170	1	.987637
4.5	.379599		.250383	1	−.567297		.724121		.302348	1	.990193
5.0	.367502		.279552	1	−.623894		.784423		.332250	1	.992034
5.5	.355992		.308631	1	−.678303		.842515		.362084	1	.993403
6.0	.345201		.337750	1	−.730816		.898773		.392007	1	.994448
6.5	.335149		.367013	1	−.781664		.953476		.422142	1	.995264
7.0	.325810		.396516	1	−.831033		.100684	1	.452594	1	.995912
7.5	.317137		.426338	1	−.879076		.105905	1	.483454	1	.996436
8.0	.309076		.456557	1	−.925920		.111023	1	.514804	1	.996866
8.5	.301570		.487242	1	−.971673		.116052	1	.546720	1	.997222
9.0	.294569		.518463	1	−.101643	1	.121002	1	.579277	1	.997521
9.5	.288024		.550286	1	−.106027	1	.125881	1	.612547	1	.997774
10.0	.281893		.582777	1	−.110326	1	.130698	1	.646603	1	.997991

POSITRON Z = 88, A = 224

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.125429 − 1	.287875	− 1	−.732143	− 2	.181052	− 1	.677069	− 1	.614338
1.0	.192953	.274166		−.691480	− 1	.135618		.511218		.841434
1.5	.341709	.618004		−.154157		.259726		.989409		.919293
2.0	.401200	.963424		−.237354		.363447		.140102	1	.952121
2.5	.417025	.129361	1	−.314515		.452080		.176476	1	.968555
3.0	.414693	.160972	1	−.386029		.530902		.209975	1	.977847
3.5	.405128	.191547	1	−.452902		.603123		.241769	1	.983581
4.0	.392963	.221418	1	−.516016		.670655		.272561	1	.987356
4.5	.380200	.250850	1	−.576051		.734686		.302794	1	.989970
5.0	.367709	.280045	1	−.633521		.795996		.332766	1	.991853
5.5	.355850	.309166	1	−.688817		.855122		.362689	1	.993252
6.0	.344750	.338345	1	−.742244		.912453		.392726	1	.994321
6.5	.334425	.367692	1	−.794041		.968280		.423003	1	.995155
7.0	.324844	.397303	1	−.844404		.102283	1	.453630	1	.995818
7.5	.315956	.427265	1	−.893493		.107629	1	.484702	1	.996354
8.0	.307702	.457658	1	−.941442		.112881	1	.516306	1	.996794
8.5	.300025	.488555	1	−.988366		.118051	1	.548521	1	.997158
9.0	.292869	.520030	1	−.103436	1	.123151	1	.581429	1	.997464
9.5	.286185	.552153	1	−.107952	1	.128191	1	.615106	1	.997723
10.0	.279928	.584995	1	−.112392	1	.133180	1	.649631	1	.997944

POSITRON Z = 89, A = 226

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.121038 - 1	.284443	- 1	-.732744	- 2	.179387	- 1	.662593	- 1	.610014
1.0	.192845	.274663		-.701707	- 1	.136820		.509381		.838640
1.5	.343840	.620316		-.156751		.263082		.989751		.917670
2.0	.404170	.967093		-.241384		.368594		.140311	1	.951106
2.5	.419925	.129812	1	-.319783		.458681		.176801	1	.967871
3.0	.417178	.161475	1	-.392392		.538751		.210381	1	.977358
3.5	.407105	.192084	1	-.460270		.612109		.242241	1	.983215
4.0	.394436	.221985	1	-.524340		.680725		.273098	1	.987073
4.5	.381209	.251449	1	-.585313		.745826		.303404	1	.989744
5.0	.368302	.280687	1	-.643722		.808217		.333463	1	.991669
5.5	.356073	.309867	1	-.699976		.868455		.363496	1	.993100
6.0	.344646	.339123	1	-.754392		.926944		.393666	1	.994192
6.5	.334032	.368572	1	-.807221		.983987		.424108	1	.995045
7.0	.324196	.398313	1	-.858666		.103982	1	.454935	1	.995723
7.5	.315080	.428437	1	-.908896		.109464	1	.486245	1	.996271
8.0	.306624	.459027	1	-.958053		.114861	1	.518131	1	.996721
8.5	.298764	.490163	1	-.100626	1	.120186	1	.550679	1	.997093
9.0	.291445	.521920	1	-.105362	1	.125451	1	.583972	1	.997406
9.5	.284613	.554376	1	-.110023	1	.130667	1	.618096	1	.997671
10.0	.278223	.587606	1	-.114618	1	.135845	1	.653134	1	.997897

POSITRON Z = 90, A = 228

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.116878 − 1	.281127	− 1	−.733451	− 2	.177765	− 1	.648599	− 1	.605731
1.0	.192858	.275241		−.712205	− 1	.138055		.507689		.835843
1.5	.346187	.622817		−.159414		.266526		.990374		.916038
2.0	.407384	.971054		−.245522		.373882		.140562	1	.950082
2.5	.423062	.130303	1	−.325192		.465468		.177183	1	.967180
3.0	.419879	.162028	1	−.398927		.546832		.210859	1	.976864
3.5	.409274	.192683	1	−.467842		.621373		.242801	1	.982845
4.0	.396081	.222627	1	−.532904		.691123		.273741	1	.986786
4.5	.382370	.252140	1	−.594852		.757349		.304140	1	.989516
5.0	.369030	.281439	1	−.654244		.820883		.334311	1	.991483
5.5	.356419	.310697	1	−.711505		.882303		.364479	1	.992945
6.0	.344654	.340055	1	−.766965		.942027		.394814	1	.994062
6.5	.333743	.369633	1	−.820887		.100037	1	.425456	1	.994934
7.0	.323643	.399535	1	−.873485		.105759	1	.456521	1	.995627
7.5	.314293	.429855	1	−.924935		.111388	1	.488115	1	.996188
8.0	.305628	.460683	1	−.975389		.116941	1	.520334	1	.996647
8.5	.297581	.492101	1	−.102498	1	.122434	1	.553271	1	.997028
9.0	.290095	.524192	1	−.107381	1	.127879	1	.587015	1	.997348
9.5	.283112	.557037	1	−.112200	1	.133289	1	.621658	1	.997619
10.0	.276585	.590720	1	−.116963	1	.138673	1	.657292	1	.997850

POSITRON Z = 91, A = 230

p	F_0		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.112938	− 1	.277925	− 1	−.734271	− 2	.176187	− 1	.635077	− 1	.601492
1.0	.192994		.275903		−.722990	− 1	.139325		.506147		.833043
1.5	.348760		.625514		−.162150		.270065		.991293		.914395
2.0	.410853		.975323		−.249774		.379322		.140859	1	.949051
2.5	.426443		.130835	1	−.330752		.472460		.177624	1	.966483
3.0	.422801		.162634	1	−.405647		.555167		.211413	1	.976365
3.5	.411641		.193350	1	−.475636		.630944		.243456	1	.982472
4.0	.397900		.223352	1	−.541729		.701886		.274500	1	.986497
4.5	.383687		.252931	1	−.604697		.769301		.305016	1	.989286
5.0	.369899		.282311	1	−.665122		.834050		.335326	1	.991295
5.5	.356891		.311671	1	−.723447		.896731		.365660	1	.992789
6.0	.344777		.341157	1	−.780016		.957780		.396196	1	.993931
6.5	.333558		.370894	1	−.835104		.101753	1	.427076	1	.994822
7.0	.323186		.400991	1	−.888936		.107624	1	.458426	1	.995530
7.5	.313595		.431549	1	−.941700		.113413	1	.490355	1	.996103
8.0	.304715		.462659	1	−.993554		.119137	1	.522965	1	.996572
8.5	.296477		.494412	1	−.104464	1	.124814	1	.556357	1	.996962
9.0	.288818		.526895	1	−.109508	1	.130457	1	.590627	1	.997289
9.5	.281681		.560197	1	−.114499	1	.136079	1	.625875	1	.997566
10.0	.275014		.594408	1	−.119446	1	.141693	1	.662202	1	.997802

POSITRON Z = 92, A = 236

p	F_o		f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.108884	− 1	.274456	− 1	−.733965	− 2	.174430	− 1	.621235	− 1	.597294
1.0	.192687		.276282		−.732830	− 1	.140453		.504150		.830240
1.5	.350531		.627613		−.164683		.273358		.991389		.912744
2.0	.413366		.978728		−.253712		.384437		.141052	1	.948011
2.5	.428812		.131262	1	−.335895		.479069		.177955	1	.965780
3.0	.424699		.163125	1	−.411858		.563080		.211860	1	.975861
3.5	.412992		.193900	1	−.482839		.640068		.244019	1	.982095
4.0	.398722		.223968	1	−.549893		.712193		.275193	1	.986205
4.5	.384029		.253631	1	−.613825		.780804		.305865	1	.989053
5.0	.369817		.283121	1	−.675239		.846794		.336363	1	.991105
5.5	.356437		.312622	1	−.734598		.910781		.366927	1	.992632
6.0	.343999		.342288	1	−.792261		.973221		.397740	1	.993798
6.5	.332495		.372249	1	−.848516		.103446	1	.428953	1	.994708
7.0	.321874		.402620	1	−.903601		.109478	1	.460697	1	.995432
7.5	.312064		.433509	1	−.957714		.115440	1	.493091	1	.996017
8.0	.302990		.465013	1	−.101103	1	.121353	1	.526244	1	.996497
8.5	.294580		.497231	1	−.106369	1	.127233	1	.560266	1	.996895
9.0	.286768		.530259	1	−.111583	1	.133097	1	.595264	1	.997229
9.5	.279494		.564194	1	−.116759	1	.138959	1	.631348	1	.997512
10.0	.272704		.599135	1	−.121907	1	.144834	1	.668631	1	.997754

POSITRON Z = 93, A = 237

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.105435 − 1	.271572 − 1		−.735336 − 2		.173002 − 1		.608830 − 1		.593139
1.0	.193213	.277207		−.744528 − 1		.141846		.503074		.827435
1.5	.353818	.630919		−.167646		.277195		.993230		.911084
2.0	.417656	.983942		−.258318		.390337		.141484	1	.946964
2.5	.433003	.131922	1	−.341926		.486672		.178576	1	.965071
3.0	.428379	.163892	1	−.419165		.572174		.212636	1	.975353
3.5	.416055	.194762	1	−.491339		.650552		.244943	1	.981714
4.0	.401180	.224928	1	−.559552		.724034		.276271	1	.985910
4.5	.385934	.254701	1	−.624644		.794014		.307117	1	.988818
5.0	.371228	.284320	1	−.687245		.861417		.337817	1	.990913
5.5	.357414	.313979	1	−.747838		.926887		.368618	1	.992473
6.0	.344593	.343835	1	−.806800		.990898		.399711	1	.993663
6.5	.332753	.374026	1	−.864434		.105382	1	.431255	1	.994593
7.0	.321835	.404673	1	−.920989		.111593	1	.463386	1	.995333
7.5	.311763	.435889	1	−.976677		.117749	1	.496231	1	.995931
8.0	.302455	.467780	1	−.103168	1	.123871	1	.529909	1	.996421
8.5	.293838	.500449	1	−.108617	1	.129978	1	.564538	1	.996828
9.0	.285839	.534003	1	−.114028	1	.136087	1	.600233	1	.997169
9.5	.278398	.568545	1	−.119416	1	.142215	1	.637118	1	.997458
10.0	.271458	.604187	1	−.124794	1	.148378	1	.675318	1	.997705

POSITRON Z = 94, A = 239

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.102095 – 1	.268707 – 1		–.736537 – 2		.171569 – 1		.596680 – 1		.589026
1.0	.193730	.278135		–.756258 – 1		.143241		.502020		.824629
1.5	.357104	.634252		–.170628		.281068		.995151		.909415
2.0	.421933	.989227		–.262955		.396316		.141936	1	.945908
2.5	.437156	.132596	1	–.348003		.494397		.179230	1	.964356
3.0	.431996	.164684	1	–.426535		.581443		.213467	1	.974840
3.5	.419034	.195664	1	–.499927		.661270		.245947	1	.981330
4.0	.403538	.225948	1	–.569331		.736180		.277461	1	.985612
4.5	.387725	.255856	1	–.635626		.807615		.308519	1	.988580
5.0	.372517	.285637	1	–.699469		.876532		.339467	1	.990720
5.5	.358261	.315491	1	–.761364		.943603		.370560	1	.992312
6.0	.345054	.345584	1	–.821708		.100932	1	.401998	1	.993528
6.5	.332875	.376061	1	–.880818		.107408	1	.433947	1	.994477
7.0	.321659	.407048	1	–.938960		.113818	1	.466553	1	.995233
7.5	.311323	.438667	1	–.996360		.120189	1	.499951	1	.995843
8.0	.301783	.471031	1	–.105322	1	.126545	1	.534271	1	.996344
8.5	.292957	.504254	1	–.110971	1	.132905	1	.569640	1	.996759
9.0	.284774	.538450	1	–.116600	1	.139291	1	.606188	1	.997108
9.5	.277166	.573736	1	–.122224	1	.145720	1	.644052	1	.997403
10.0	.270076	.610234	1	–.127859	1	.152213	1	.683373	1	.997655

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.990889 − 2	.266145	− 1	−.738535 − 2		.170304 − 1		.585357	− 1	.584955
1.0	.194688	.279356		−.769025 − 1		.144784		.501463		.821821
1.5	.361216	.638253		−.173857		.285265		.998054		.907737
2.0	.427174	.995532		−.267978		.402776		.142527	1	.944845
2.5	.442282	.133403	1	−.354592		.502745		.180062	1	.963634
3.0	.436547	.165640	1	−.434543		.591467		.214508	1	.974323
3.5	.422896	.196759	1	−.509274		.672879		.247193	1	.980942
4.0	.406724	.227189	1	−.579997		.749354		.278926	1	.985311
4.5	.390296	.257261	1	−.647626		.822388		.310230	1	.988340
5.0	.374540	.287234	1	−.712850		.892974		.341461	1	.990524
5.5	.359803	.317316	1	−.776197		.961813		.372883	1	.992149
6.0	.346173	.347680	1	−.838082		.102943	1	.404707	1	.993391
6.5	.333624	.378478	1	−.898842		.109622	1	.437105	1	.994360
7.0	.322082	.409846	1	−.958759		.116252	1	.470235	1	.995131
7.5	.311458	.441911	1	−.101808	1	.122862	1	.504240	1	.995755
8.0	.301661	.474798	1	−.107701	1	.129478	1	.539262	1	.996266
8.5	.292608	.508629	1	−.113575	1	.136122	1	.575442	1	.996690
9.0	.284221	.543529	1	−.119449	1	.142817	1	.612922	1	.997046
9.5	.276431	.579628	1	−.125339	1	.149584	1	.651856	1	.997348
10.0	.269177	.617061	1	−.131264	1	.156446	1	.692403	1	.997605

POSITRON Z = 96, A = 243

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.959475 − 2	.263311	− 1	−.739402	− 2	.168868	− 1	.573711	− 1	.580925
1.0	.195185	.280290		−.780835	− 1	.146192		.500474		.819013
1.5	.364488	.641660		−.176883		.289240		.100021	1	.906051
2.0	.431408	.100101	1	−.272698		.408962		.143031	1	.943775
2.5	.446339	.134115	1	−.360795		.510799		.180810	1	.962907
3.0	.440015	.166498	1	−.442095		.601205		.215485	1	.973800
3.5	.425682	.197767	1	−.518121		.684233		.248408	1	.980550
4.0	.408855	.228366	1	−.590136		.762337		.280410	1	.985007
4.5	.391835	.258639	1	−.659097		.837063		.312024	1	.988097
5.0	.375559	.288855	1	−.725725		.909445		.343622	1	.990326
5.5	.360368	.319233	1	−.790572		.980214		.375478	1	.991985
6.0	.346344	.349953	1	−.854077		.104992	1	.407812	1	.993252
6.5	.333450	.381178	1	−.916596		.111900	1	.440811	1	.994242
7.0	.321607	.413053	1	−.978433		.118780	1	.474643	1	.995029
7.5	.310718	.445717	1	−.103985	1	.125664	1	.509467	1	.995666
8.0	.300689	.479307	1	−.110108	1	.132581	1	.545438	1	.996188
8.5	.291430	.513958	1	−.116235	1	.139557	1	.582716	1	.996621
9.0	.282860	.549810	1	−.122387	1	.146618	1	.621464	1	.996984
9.5	.274907	.587011	1	−.128583	1	.153789	1	.661856	1	.997292
10.0	.267506	.625717	1	−.134843	1	.161098	1	.704081	1	.997555

POSITRON Z = 97, A = 247

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.929762 − 2	.260590 − 1	−.740434 − 2	.167494 − 1	.562516 − 1	.576937
1.0	.195821	.281327	−.793034 − 1	.147661	.499695	.816204
1.5	.368028	.645330	−.180014	.293377	.100283 1	.904357
2.0	.435945	.100693 1	−.277590	.415420	.143612 1	.942696
2.5	.450681	.134893 1	−.367238	.519235	.181666 1	.962174
3.0	.443735	.167446 1	−.449965	.611445	.216608 1	.973273
3.5	.428687	.198895 1	−.527373	.696227	.249815 1	.980155
4.0	.411175	.229699 1	−.600783	.776114	.282136 1	.984700
4.5	.393539	.260216 1	−.671198	.352711	.314123 1	.987853
5.0	.376721	.290727 1	−.739369	.927095	.346159 1	.990127
5.5	.361060	.321460 1	−.805880	.100003 1	.378532 1	.991819
6.0	.346626	.352609 1	−.871193	.107210 1	.411476 1	.993112
6.5	.333376	.384344 1	−.935690	.114378 1	.445190 1	.994122
7.0	.321222	.416825 1	−.999698	.121544 1	.479859 1	.994926
7.5	.310061	.450204 1	−.106350 1	.128744 1	.515657 1	.995576
8.0	.299793	.484631 1	−.112737 1	.136010 1	.552761 1	.996108
8.5	.290322	.520259 1	−.119155 1	.143372 1	.591351 1	.996550
9.0	.281564	.557248 1	−.125627 1	.150861 1	.631617 1	.996921
9.5	.273443	.595767 1	−.132178 1	.158508 1	.673762 1	.997235
10.0	.265893	.635996 1	−.138832 1	.166345 1	.718009 1	.997504

POSITRON Z = 98, A = 249

p	F_0	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.903120 − 2	.258174 − 1		−.742303 − 2		.166299 − 1		.552141 − 1		.572989
1.0	.196916	.282678		−.806364 − 1		.149299		.499463		.813395
1.5	.372447	.649729		−.183418		.297894		.100657	1	.902655
2.0	.441506	.101399	1	−.282914		.422453		.144356	1	.941611
2.5	.456052	.135823	1	−.374268		.528433		.182737	1	.961435
3.0	.448437	.168587	1	−.458578		.622634		.217993	1	.972742
3.5	.432613	.200257	1	−.537529		.709363		.251534	1	.979756
4.0	.414356	.231309	1	−.612508		.791243		.284230	1	.984390
4.5	.396047	.262118	1	−.684562		.869939		.316649	1	.987606
5.0	.378638	.292976	1	−.754482		.946577		.349190	1	.989925
5.5	.362462	.324123	1	−.822882		.102196	1	.382157	1	.991652
6.0	.347580	.355765	1	−.890255		.109672	1	.415796	1	.992971
6.5	.333940	.388086	1	−.957009		.117135	1	.450325	1	.994002
7.0	.321444	.421259	1	−.102350	1	.124627	1	.485944	1	.994822
7.5	.309984	.455451	1	−.109005	1	.132189	1	.522851	1	.995484
8.0	.299452	.490830	1	−.115694	1	.139855	1	.561243	1	.996028
8.5	.289748	.527569	1	−.122447	1	.147663	1	.601328	1	.996479
9.0	.280783	.565350	1	−.129291	1	.155648	1	.643326	1	.996858
9.5	.272477	.605369	1	−.136255	1	.163849	1	.687477	1	.997178
10.0	.264762	.647838	1	−.143368	1	.172304	1	.734047	1	.997452

POSITRON Z = 99, A = 256

p	F_0	f_1	g_1	f_{-1}	g_{-1}	Sin Δ
.5	.874428 − 2	.255395 − 1	−.742720 − 2	.164896 − 1	.541312 − 1	.569082
1.0	.197371	.283640	−.818365 − 1	.150767	.498696	.810587
1.5	.375665	.653334	−.186544	.302134	.100942 1	.900945
2.0	.445626	.101998 1	−.287834	.429170	.145004 1	.940518
2.5	.459902	.136636 1	−.380802	.537330	.183729 1	.960690
3.0	.451611	.169619 1	−.466640	.633589	.219344 1	.972206
3.5	.435038	.201537 1	−.547120	.722387	.253286 1	.979353
4.0	.416075	.232887 1	−.623694	.806437	.286450 1	.984078
4.5	.397140	.264059 1	−.697460	.887473	.319425 1	.987356
5.0	.379187	.295360 1	−.769251	.966673	.352627 1	.989722
5.5	.362541	.327048 1	−.839717	.104489 1	.386378 1	.991483
6.0	.347255	.359341 1	−.909385	.112280 1	.420947 1	.992829
6.5	.333266	.392443 1	−.978702	.120095 1	.456573 1	.993880
7.0	.320469	.426544 1	−.104806 1	.127983 1	.493483 1	.994716
7.5	.308747	.461834 1	−.111781 1	.135987 1	.531901 1	.995392
8.0	.297986	.498506 1	−.118831 1	.144151 1	.572062 1	.995947
8.5	.288082	.536762 1	−.125987 1	.152518 1	.614211 1	.996407
9.0	.278940	.576818 1	−.133285 1	.161134 1	.658618 1	.996794
9.5	.270479	.618911 1	−.140758 1	.170046 1	.705578 1	.997121
10.0	.262626	.663299 1	−.148445 1	.179307 1	.755423 1	.997400

POSITRON Z = 100, A = 254

p	F_o	f_1		g_1		f_{-1}		g_{-1}		Sin Δ
.5	.853581 − 2	.253597	− 1	−.746339	− 2	.164078	− 1	.532567	− 1	.565215
1.0	.199433	.285657		−.834146	− 1	.152783		.499638		.807779
1.5	.381965	.659306		−.190546		.307505		.101562	1	.899228
2.0	.453383	.102953	1	−.294112		.437514		.146117	1	.939418
2.5	.467470	.137906	1	−.389137		.548280		.185284	1	.959939
3.0	.458401	.171192	1	−.476917		.646979		.221334	1	.971665
3.5	.440913	.203429	1	−.559321		.738203		.255738	1	.978947
4.0	.421067	.235136	1	−.637876		.824768		.289418	1	.983762
4.5	.401335	.266720	1	−.713737		.908485		.322984	1	.987104
5.0	.382679	.298504	1	−.787783		.990592		.356872	1	.989516
5.5	.365420	.330761	1	−.860705		.107200	1	.391424	1	.991312
6.0	.349600	.363727	1	−.933072		.115344	1	.426930	1	.992685
6.5	.335146	.397621	1	−.100537	1	.123550	1	.463651	1	.993757
7.0	.321941	.432654	1	−.107803	1	.131873	1	.501841	1	.994610
7.5	.309860	.469038	1	−.115146	1	.140365	1	.541756	1	.995300
8.0	.298783	.506992	1	−.122605	1	.149076	1	.583664	1	.995865
8.5	.288598	.546748	1	−.130219	1	.158058	1	.627855	1	.996335
9.0	.279207	.588558	1	−.138029	1	.167367	1	.674646	1	.996729
9.5	.270523	.632699	1	−.146077	1	.177062	1	.724395	1	.997063
10.0	.262469	.679481	1	−.154410	1	.187211	1	.777507	1	.997348

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