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Fundamental solution of multidimensional axisymmetric Helmholtz equation

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Abstract

© 2016 Informa UK Limited, trading as Taylor & Francis Group For axisymmetric Helmholtz equation (Formula presented.) fundamental solutions have been constructed. Those are written explicitly via confluent Horn functions. The obtained fundamental solutions have been proved to possess a power singularity (Formula presented.).

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Keywords

axial symmetry, Bessel operator, confluent Horn function, Fundamental solution, hypergeometric Gauss function, singular Helmholtz equation