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AFDELING ZUIVERE WISKUNDE
(DEPARTMENT OF PURE MATHEMATICS)

ZN 71/77 FEBRUARI

M.R. BEST

A(11,4,4) = 35 OR SOME NEW OPTIMAL CONSTANT WEIGHT CODES

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$A(11,4,4) = 35$ or some new optimal constant weight codes

by

M.R. Best

ABSTRACT

We give all 11 constant weight codes containing 35 words of length 11, weight 4, and minimal Hamming distance 4. These codes are optimal.

KEY WORDS & PHRASES: *constant weight code, packing, sphere packing.*


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1111111111000000000000000000000000000000
110000000001111111111000000000000000000
001110000001111000000111110000000000000
0000011100010001110001110001110000000000
001001001001000000111000110110110000000
10000010010010010010010010010110010110
010100000010010010100100010001001101110
000101010100100010100100010010101010101
00010001110000110000101010000101101
10100001001000101001000100110001011
01001100010010000100100101000110011

```

(3,4)(6,7)(8,9)(10,11)

```

1111111111000000000000000000000000000000
110000000001111111111000000000000000000
001110000001111000000111110000000000000
0000011100010001110001110001110000000000
001001001001000000111000110110110000000
10000010010010010010010010010110010110
010100000010010010100100010001001101110
00010001110000101001001000110001101
000010101010100000100101001000110101
01001100010000110000100110000101011
1010000100100100010100010010010101011

```

(3,4)(6,7)(8,9)(10,11)

REFERENCES

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