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Mathematical Sciences Department

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September 5, 1978

Dr. N. J. A. Sloane  
Mathematics Research Center  
Bell Telephone Laboratories, Inc.  
Murray Hill, N. J.

Dear Dr. Sloane:

Schrödinger

A1003

Enclosed is a 19'th century paper about sequence 1163 on page 107 of your book, "A Handbook of Integer Sequences". See also Exercise 2.3.4-31 of D. E. Knuth's, "The Art of Computer Programming, Second Edition: Volume 1/Fundamental Algorithms".

Exercise 2.21-12 of Knuth's book obtains the asymptotic behavior of this sequence. Page 194 of Szegö's, "Orthogonal Polynomials" (revised edition, 1959) derives a complete asymptotic expansion for large index. A forthcoming paper of mine proves the convergence of Szegö's series.

Sincerely,

*John S. Lew*  
John S. Lew

JSL:ngp  
Enclosure