

munity, and its guests, as a meeting place and retreat. Frequent symposia are held in this congenial spot, and the present volume consists of summaries of the lectures delivered at two such gatherings in 1965.

The topic of the first collection is numerical problems in Approximation Theory, and it consists of 11 fairly full presentations, most of which deal with some aspect of Chebyshev approximation. The second symposium is entitled "Methods of Functional Analysis in Numerical Mathematics," and 16 talks are represented, some by brief abstracts.

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**60[2.10].**—BRUCE S. BERGER, ROBERT DANSON & ROBERT CARPENTER, **A.** *Tables of Zeros and Weights for Gauss-Laguerre Quadrature to 24S for  $N = 400, 500,$  and  $600,$  ms. of 4 typewritten pp. + 12 computer sheets (reduced), 28 cm. **B.** *Tables of Zeros and Weights for Gauss-Laguerre Quadrature to 23S for  $N = 700, 800,$  and  $900,$  ms. of 4 typewritten pp. + 18 computer sheets (reduced), 28 cm. Copies deposited in the UMT file; additional copies obtainable from Professor Berger, Department of Mechanical Engineering, The University of Maryland, College Park, Md. 20742.**

These two manuscript tables (prepared in November 1968 and January 1969, respectively) represent an impressive extension of the authors' 24S table [1] of zeros and weights for Gauss-Laguerre quadrature corresponding to  $N = 100, 150, 200,$  and  $300.$

As in the preparation of the earlier table, the present tables were calculated on a CDC 6600 system, using double-precision floating-point operations accurate to approximately 30S. Moreover, the same over-all checks have been applied to the computed values.

The senior author has recently applied these extensive tables to calculations relating to a problem in acoustics [2].

J. W. W.

1. BRUCE S. BERGER & ROBERT DANSON, *Tables of Zeros and Weights for Gauss-Laguerre Quadrature,* ms. deposited in the UMT file. (See *Math. Comp.*, v. 22, 1968, pp. 458-459, RMT 40.)

2. BRUCE S. BERGER, "Dynamic response of an infinite cylindrical shell in an acoustic medium," *J. Appl. Mech.*, v. 36, 1969, pp. 342-345.

**61[2.10].**—LEE M. HUBBELL and RALPH E. CHRISTOFFERSEN, *Tabulation of a New Set of Orthogonal Polynomials for Numerical Integration,* ms. of 8 typewritten pages & 18 typewritten pages of tables & 5 pages of figures, deposited in the UMT file.

The authors consider the orthogonal polynomials associated with the quadrature problem

$$(1) \quad \int_1^{\infty} \frac{e^{-x}}{x^k} f(x) dx = \sum_{i=0}^j w_{i,j}^{(k)} f(x_{i,j}^{(k)}) + R_j^{(k)} f,$$

where  $R_j^{(k)} f = 0$  if  $f(x)$  is a polynomial of degree  $2j + 1$  or less. The abscissas  $x_{i,m}^{(k)}$  are the zeros of a polynomial