

probabilities. Graphs of Nilsson level scheme of single particle orbits in spheroidal potential. Table of measured ground state spins of odd-A and odd-odd nuclei. Tables of Clebsch-Gordan coefficients.

Chapter X. *Calibration Standards.*

Tables of standard gamma and electron lines and of standard alpha rays. Gamma-ray absorption coefficient in NaI crystals. Table of standard nuclides for calibration of gamma-ray spectrometer.

The tables and graphs have been presented so as to be easily read, and the quality of the printing is good. Much of the material is used frequently by nuclear physicists but is widely scattered in the literature. Thus, this book should prove very helpful to people in the field of nuclear physics, and this reviewer recommends it highly.

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2[D, L].—L. K. FREVEL, J. W. TURLEY & D. R. PETERSEN, *Seven-Place Table of Iterated Sine*, The Dow Chemical Company, Midland, Michigan, 1959. Deposited in UMT File.

Following a detailed description of the method of computation employed, the authors give a 7D table of the  $n$ th iterated sine function of  $x$  for  $n = 0(.05)10$ , and  $x = k(\pi/20)$ , where  $k = 1(1)10$ . It is stated that the computations were performed on a Datatron 204, and the results are considered correct to within  $5 \cdot 10^{-7}$ .

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3[G].—K. M. HOWELL, *Revised Tables of 6j-Symbols*, U. Southampton Math. Dept., Research Report 59-1, 1959, xvi + 181 p., 33 cm.

The Wigner 6j-symbol has been defined by Wigner in general in connection with the reduction of the triple Kronecker product of any simply reducible group. In these tables this group is taken to be either the three-dimensional rotation group or the two-dimensional unitary group. The symbols are denoted by

$$\begin{Bmatrix} j_1 & j_2 & j_3 \\ k_1 & k_2 & k_3 \end{Bmatrix}$$

where the quantities  $j_1, \dots, k_3$  are integers or half-integers. If we let

$$J_0 = j_1 + j_2 + j_3, \quad J_1 = j_1 + k_2 + k_3, \quad J_2 = j_2 + k_1 + k_3$$

$$J_3 = j_3 + k_1 + k_2$$

$$K_1 = j_1 + j_2 + k_1 + k_2 \quad K_2 = j_1 + j_3 + k_1 + k_3$$

$$K_3 = j_2 + j_3 + k_2 + k_3,$$

then the explicit expression for the 6j-symbol is

$$\begin{Bmatrix} j_1 & j_2 & j_3 \\ k_1 & k_2 & k_3 \end{Bmatrix} = \left\{ \prod_{r,s} (K_r - J_s)! / \prod_s (J_s + 1)! \right\}^{\frac{1}{2}} \\ \cdot \sum_t (-1)^t (t+1)! / \left\{ \prod_r (K_r - t)! \prod_s (t - J_s)! \right\}.$$