TABLE ERRATA

531.—*Cumulative Index to Mathematics of Computation,* Vols. 1–23 (1943–1969).

In the author index of this work, all references to *Journal of Mathematical Physics* (*J. Mathematical Phys.*) should be to *Journal of Mathematics and Physics.* Listings affected are the following:

Abbot	1R
Abramowitz	1R, 2R, 6R, 8R
Adams (Douglas P.)	1R
Barakat	2E
Blanch	1R, 2R
Bogert	2R
Boukamp	2R
Cambi	3R
Carrus	1R, 2R
Chien	1R
Clark (R. A.)	1R
Corrington	1R, 2R
Crispin	1R, 2R
Crossley	1R
Danford	1R
Dwight	3RE, 5R
Goldstein (L.)	1RE
Greenwood (R. E., Jr.)	1R
Hammersley	3R
Hasimoto	1R
Heuman	1R
Hillman	3R
Horenstein	1R
Horton	2R
Houston	1E
Hunter (H. E.)	2R, 3R
Imai	1R
Infield	1R
Jaeger (J. C.)	4R
Kaplan	1R, 2R, 3R, 4R
Kavanagh	1R
Kleinman	1R, 2R
Kopal	3RE, 4R
Kruse (U. E.)	1R
Laderman	1R
Levin (E.)	1E
Ling	1R
Lowan	4R, 5R, 6R, 7R, 8R, 10R, 11R, 12R
Macdonald (A. D.)	1R
Meyers	1R, 2R

Miehle	1R
Moon	1R
Nielson (K. J.)	1RE
Ramsey	1R
Reissner	1R
Salzer (H. E.)	4R, 5R, 6R, 9R, 10R, 12R, 13R, 15R, 19R, 23R, 31R, 33R, 36R, 39R, 43R, 47R, 49R, 54R, 56R, 57R, 60R, 65R
Sard	1R, 2R
Shannon	1R
Siegel (K. M.)	2R, 3R
Smith (V. G.)	1R
Spence (R. D.)	1R
Sternberg (R. L.)	1R
Truenfels	1R
Wells (C.)	1R

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532.— A. ERDÉLYI; W. MAGNUS, F. OBERHETTINGER & F. G. TRICOMI, *Tables of Integral Transforms*, Vol. II, McGraw-Hill Book Co., New York, 1954.

On page 291, Eq. (16.5(23)) is incorrect. A correct expression is given by Bailey [1] as Eq. (1.3):

$$I_{mn}^{ab} = \int_{-\infty}^{\infty} e^{-x^2/2}\, He_m(ax)He_n(bx)\,dx = 2^{(1-n-m)/2}\int_{-\infty}^{\infty} e^{-y^2} H_m(ay)H_n(by)\,dy$$

$$= 2^{(1+m+n)/2}\,\Gamma\left(\frac{m+n+1}{2}\right) a^n b^n (a^2-1)^{(m-n)/2}$$

$$\cdot\, {}_2F_1\left(-\frac{n}{2}, \frac{1-n}{2}; \frac{1-m-n}{2}; \frac{1}{a^2}+\frac{1}{b^2}-\frac{1}{a^2b^2}\right);$$

where $m+n$ is even, and

$${}_2F_1(\alpha,\beta;\gamma;x) = \sum_{n=0}^{\infty} \frac{\alpha^{(n)}\beta^{(n)}}{\gamma^{(n)}}\frac{x^n}{n!}.$$

A form in terms of Legendre polynomials is given incorrectly by Bailey in his next equation. A correct expression in terms of these functions may be obtained using formulas from Gradshteyn and Ryzhik [2] (8.772(1) and 8.812[3])

$$I_{mn}^{ab} = (2\pi)^{1/2} n! a^n b^n (a^2-1)^{(m-n)/2}(\mu^2-1)^{(n-m)/4}\mu^{-n}\,\text{P}(\mu)_{(m+n)/2}^{(m-n)/2}, \qquad |\mu| > 1$$

$$= (-1)^{(m-n)/2}(2\pi)^{1/2} n! a^n b^n (a^2-1)^{(m-n)/2}(1-\mu^2)^{(n-m)/4}\mu^{-n} P(\mu)_{(m+n)/2}^{(m-n)/2}, \qquad |\mu| < 1$$

where $m+n$ is even,

$$\frac{1}{\mu^2} = \frac{1}{a^2} + \frac{1}{b^2} - \frac{1}{a^2b^2},$$

$$\mathcal{P}_j^k(x) = (x^2 - 1)^{k/2} \frac{d^k P_j(x)}{dx^k}, \qquad k \geqslant 0,$$

$$P_j^k(x) = (-1)^k (1 - x^2)^{k/2} \frac{d^k P_j(x)}{dx}, \qquad k \geqslant 0,$$

$$P_j(x) = \frac{1}{2^j j!} \frac{d^j}{dx^j} (x^2 - 1)^j,$$

$$P_j^{-k}(x) = (-1)^k \frac{(j-k)!}{(j+k)!} P_j^k(x),$$

$$\mathcal{P}_j^{-k}(x) = \frac{(j-k)!}{(j+k)!} \mathcal{P}_j^k(x).$$

For $|\mu| = 1$ the integral I_{mn}^{ab} is zero unless $m = n$, in which case its value is

$$I_{nn}^{ab} = (2\pi)^{1/2} n! (a^2 + b^2 - 1)^{n/2}.$$

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1. W. N. BAILEY, "Some integrals involving Hermite polynomials," *J. London Math. Soc.*, v. 23, 1948, pp. 291–297.

2. I. S. GRADSHTEYN & I. M. RYZHIK, *Tables of Integrals, Series, and Products*, 4th ed., Academic Press, New York, 1965.

3. *Math. Comp.*, v. 30, 1976, p. 675, MTE 523.