

At the close of the book the reader will find historical notes that, in the main, seem to be accurate, and a comprehensive bibliography, as well as a Subject Index and an Index of Notation. Stig I. Andersson has done a superb job of translating the Russian text into English.

REFERENCES

- [Ber] F. A. Berezin, *Wick and anti-Wick operator symbols*, Mat. Sb. **86** (1971), 578–610; English transl. in Math. USSR-Sb. **15** (1971), 577–606.
- [Gr] G. Grubb, *Functional calculus of pseudo-differential boundary problems*, Birkhäuser, Boston, 1986.
- [Hö1] L. Hörmander, *The spectral function of an elliptic operator*, Acta Math. **121** (1968), 193–218.
- [Hö2] ———, *The Weyl calculus of pseudo-differential operators*, Comm. Pure Appl. Math. **23** (1979), 359–443.
- [Hö3] ———, *The analysis of linear partial differential operators*. III, Springer-Verlag, Berlin and New York, 1985.
- [See] R. T. Seeley, *Complex powers of an elliptic operator*, Proc. Sympos. Pure Math., vol. 10, Amer. Math. Soc., Providence, R.I., 1967, pp. 288–307.
- [Tay] M. Taylor, *Pseudodifferential operators*, Princeton Univ. Press, Princeton, N.J., 1981.

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A treatise on generating functions, by H. M. Srivastava and H. L. Manocha. Halsted Press (Ellis Horwood Limited, Chichester), John Wiley and Sons, New York, Chichester, Brisbane, and Toronto, 1984, 569 pp., \$89.95. ISBN 0-470-20010-3

In the beginning was Laplace, who considered, among other things,

... ce que je nomme *fonctions génératrices*: c'est un nouveau genre de calcul que l'on peut nommer *calcul des fonctions génératrices*, et qui m'a paru mériter d'être cultivé par les géomètres. [2]

In other words, the idea that the two-variable function F is a *generating function* for the set of one-variable functions f_0, f_1, f_2, \dots by the way of the *generating function relation*

$$(1) \quad F(x, t) = \sum_{n=0}^{\infty} f_n(x)t^n,$$

was born just over two centuries ago. Legendre [3] gave, incidentally, one of the first examples: the generating function relation

$$(2) \quad (1 - 2xt + t^2)^{-1/2} = \sum_{n=0}^{\infty} P_n(x)t^n$$

for the Legendre polynomials P_0, P_1, P_2, \dots , known to most of us.