

Book Reviews

J. S. RUSTAGI, *Variational Methods in Statistics*, Academic Press, 1976, 236 pp. It is good to see the calculus of variations applied to a variety of subjects, even statistics, but some of the applications seem at times a bit contrived.

A. M. MATHAI AND P. N. RATHIE, *Basic Concepts in Information Theory and Statistics*, Wiley, 1975, 137 pp. Better than the title would lead one to expect. Includes a rare discussion of some little-known information-theoretic concepts.

D. GALLIA, *Intensional and Higher-Order Model Logic*, North-Holland, 1975, 148 pp. The first exposition of the ideas of the late Richard Montague.

R. A. DUBIN, *Solvable Models in Algebraic Statistical Mechanics*, Oxford, 1974, 121 pp. Unbelievable as it may sound, this book is both rigorous and about physics. One hundred more books like this might build a bridge, perhaps not as tenuous as that of San Luis Rey, between physicists and mathematicians.

E. G. MANES, *Algebraic Theories*, Springer, 1976, 356 pp. Three major achievements: (a) the first adequate exposition of universal algebra, (b) abundance of concrete examples, (c) limited use of categorical jargon. Recommended for your library.

R. H. FARRELL, *Techniques of Multivariate Calculation*, Springer, 1976, 337 pp. Does contemporary statistics really use all this fancy mathematics, including group representations, Young symmetrizers, and all that? We wish we could believe it.

J. ACZEL, *Lectures on Functional Equations and their Applications*, Academic Press, 1976, 510 pp. An already classic reference. Indispensable to every mathematician. We hope an enlarged edition will appear soon.

G. I. MARCHUK, *Methods of Numerical Mathematics*, Springer, 1975, 316 pp. Thorough and impeccable, as we may well expect of one of the leading workers in numerical analysis, but perhaps a tiny bit—shall we say—conservative?

J. M. ASK, ED., *Studies in Harmonic Analysis*, The Mathematical Association of America, 1976, 319 pp. The series "Studies in Mathematics," of which this is the thirteenth volume, is turning out to be the outstanding vehicle for top-notch mathematical exposition. This volume is one of the best; every chapter is a jewel. We wish the Association many more volumes.

M. AIGNER, *Kombinatorik*, Springer, 1975. This is the first modern textbook of combinatorics, and the first to include most of the major developments of the last fifteen years. We wish the author an early English translation.

GIAN-CARLO ROTA
Editor