## REVIEWS AND DESCRIPTIONS OF TABLES AND BOOKS

Numerous physical applications areas are presented in the book, mostly in fluid dynamics, but those range from oceanography to combustion. Research regarding the limiting behavior of numerical methods for singularly perturbed differential equations has been done in solid mechanics for some time and new results [3, 1] have recently appeared. In the area of neutral particle transport, studies of this kind have been carried out for many years and are continuing [2]. The growing interest (and success) in this type of research makes the book quite timely and easy to recommend strongly.

## L. R. S.

- 1. I. Babuška and M. Suri, *On locking and robustness in the finite element method*, SIAM J. Numer. Anal. (to appear).
- C. Börgers, E. W. Larsen, and M. L. Adams, The asymptotic diffusion limit of a linear discontinuous discretization of a two-dimensional linear transport equation, J. Comput. Phys. 98 (1992), 285-300.
- 3. S. C. Brenner and L.-Y. Sung, *Linear finite element methods for planar linear elasticity*, Math. Comp. **59** (1992), to appear.
- **20[65–04].**—JULIEN C. SPROTT, Numerical Recipes—Routines and Examples in BASIC, Cambridge Univ. Press, Cambridge, 1991, xi+398 pp., 23 cm. Price: Softcover \$32.50.

This book contains translations into BASIC of the routines contained in [1] as well as of the demonstration routines in [2]. The author cautions the reader that the routines will run only on more advanced BASIC dialects, for example, without change, on Microsoft Corp.'s QuickBASIC 4.5 or later versions, and, with minor modifications, on Borland International's Turbo BASIC and its compatible successors.

W. G.

- 1. W. H. Press, B. P. Flannery, S. A. Teukolsky and W. T. Vetterling, *Numerical recipes—The* art of scientific computing, Cambridge Univ. Press, Cambridge, 1986. [Review 3, Math. Comp. 50 (1988), 346-348.]
- W. T. Vetterling, S. A. Teukolsky, W. H. Press, and B. P. Flannery, *Numerical recipes example book*, Cambridge Univ. Press, Cambridge, 1985. [Review 4, Math. Comp. 50 (1988), 348-349.]
- 21[78-01, 78-04, 78-08].—YVES R. CRUTZEN, GIORGIO MOLINARI & GUGLIEL-MO RUBINACCI (Editors), *Industrial Application of Electromagnetic Computer Codes*, Computer and Information Science, Vol. 1, Kluwer, Dordrecht, 1990, v+263 pp., 24<sup>1</sup>/<sub>2</sub> cm. Price \$94.00/Dfl.150.00.

This book is part of a series devoted to the publication of courses and educational seminars organized by the Joint Research Centre Ispra. It focuses on the underlying mathematical models and capabilities of current computeraided design software tools for the computation of electromagnetic fields. The exposition is given from an engineering point of view.

Electromagnetic computer codes deal with the approximation of solutions to Maxwell's equations. The codes discussed are for magnetostatic field problems,

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