REVIEWS AND DESCRIPTIONS OF TABLES AND BOOKS

The numbers in brackets are assigned according to the American Mathematical Society classification scheme. The 1980 Mathematics Subject Classification can be found in the December index volumes of Mathematical Reviews.

13[34E15, 35B25].—O. AXELSSON, L. S. FRANK & A. VAN DER SLUIS (Editors), Analytical and Numerical Approaches to Asymptotic Problems in Analysis, North-Holland, Amsterdam, 1981, xvi + 381 pp., 24 cm. Price \$53.75/Dfl. 110.00.

This volume is the proceedings of a conference held in Nijmegen, The Netherlands, in mid-June of 1980. It contains 17 invited lectures and 11 contributed papers. Many articles are concerned with singular perturbations in differential equations.

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14[65F00].—MICHAEL T. HEATH (Editor), Software Catalog, Sparse Matrix Symposium in Fairfield Glade, Tennessee, October 24–27, 1982, Sponsors, U.S. Army Research Office, U.S. Office of Naval Research and Oak Ridge National Laboratory, 28cm.

From the preface:

This software catalog was prepared in conjunction with the Sparse Matrix Symposium in Fairfield Glade, Tennessee, October, 1982. It is intended to provide information on computer software for sparse matrix problems which should be useful to software developers and consumers alike. The information provided includes the problem domain to which the software is applicable, the method of solution, language and portability details, references to documentation, and a contact for further information or acquiring the software. This information is reported by means of a form which was filled out by each contributor for each item of software.

Contributions to the software catalog were solicited as part of the general announcement and call for papers for the Symposium which appeared in the official newsletters and other publications of several professional societies in mathematics, computer science, and operations research. There was also a mass mailing of general Symposium announcements to about 375 persons (mostly numerical analysts, applied mathematicians and computer scientists, plus a few engineers), and an additional mailing to about 80 persons which specifically solicited software catalog contributions. These efforts resulted in the submission of about 120 software forms. All submissions were accepted for inclusion in the catalog.