

3[65-06].—TONY F. CHAN, ROLAND GLOWINSKI, JACQUES PERIAUX & OLOF B. WIDLUND, (Editors), *Domain Decomposition Methods*, Proceedings in Applied Mathematics, SIAM, Philadelphia, PA, 1989, 463 pp., 25 $\frac{1}{2}$ cm. Price: Softcover \$49.50.

This is the proceedings of a symposium on the subject of the title of this volume. It consists of 34 papers by invited speakers. The papers were not subject to the refereeing process. The proceedings is divided into four parts: Theory (9 papers), Algorithms (11 papers), Parallel Implementation (3 papers), and Applications (11 papers).

J. H. B.

4[65-06, 65W05].—R. ELLIOTT & C. A. R. HOARE (Editors), *Scientific Applications of Multiprocessors*, Prentice-Hall International Series in Computer Science, Prentice-Hall, New York, 1989, vi + 143 pp., 24 cm. Price \$28.00.

This volume grew out of a meeting entitled "Solving Scientific Problems on Multiprocessors" held December 9-10, 1987. It contains eight papers, some followed by a discussion, and a one-page general discussion at the end of the book. The authors and their titles are: H. T. KUNG, "Computational models for parallel computers"; L. G. VALIANT, "Optimally universal parallel computers"; D. MAY, "The influence of VLSI technology on computer architecture"; A. J. G. HEY, "Reconfigurable transputer networks: practical concurrent computation"; G. C. FOX and W. FURMANSKI, "The physical structure of concurrent problems and concurrent computers"; E. CLEMENTI, "Global scientific and engineering simulations on scalar, vector, and parallel LCAP-type supercomputers"; C. J. ELLIOTT, "Very-high-performance multiple-instruction multiple-data applications"; D. J. WALLACE, "Scientific computation on SIMD and MIMD machines".

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