

48[3, 9, 10, 13].—MICHEL SIMONNARD, *Linear Programming*, translated by William S. Jewell, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1966, xxiv + 430 pp., 24 cm. Price \$9.00.

This is an exceptionally well-written and well-translated book on linear programming and related subjects which will serve as an excellent text for a one- or two-semester course or for independent study. The book contains the usual linear programming material (primal-simplex method, dual-simplex method, duality, primal-dual method, parametric programming), two chapters on linear programming in integers and mixed integer programming (there is only a brief description by the translator of branch-and-bound methods), one chapter on bounded variables and the Dantzig-Wolfe decomposition principle, and five chapters on transportation problems. Two appendices present a self-contained review of linear algebra and convex polyhedra, and a third appendix gives some basic definitions of graph theory. There is also a four-page English-French glossary and a 169-item bibliography. (The addition of numerical exercises at the end of each chapter of this book would probably make it an unbeatable textbook on the subject.)

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49[4, 5, 13.15, 13.35].—JACK K. HALE & JOSEPH P. LASALLE, Editors, *Differential Equations and Dynamical Systems*, Academic Press, New York, 1967, xvii + 544 pp., 24 cm. Price \$18.00.

We copy the dedication of this book:

This volume, as was the Symposium itself, is dedicated to Solomon Lefschetz for the many contributions he has made over the past 20 years to the development of this subject. He has influenced most of us either directly or indirectly, and to many of us he has been a mentor and a father mathematician through his inspiration, encouragement, and guidance. In life as well as in mathematics he has been a true friend and a true companion.

An excerpt from the preface follows:

This volume is the proceedings of the third of a series of international symposia on differential equations and related topics. Speakers were invited to discuss advances in the theory of ordinary differential equations including both qualitative and geometric theory, the theory of stability and control, hereditary phenomena (functional differential equations), and special topics in the theory of partial differential equations. In addition, papers containing significant new results were accepted for presentation. Invited speakers whose reports are included in this volume are: H. A. Antosiewicz, R. F. Arenstorf, L. Cesari, K. L. Cooke, A. Friedman, U. Grenander, A. Halanay, J. K. Hale, P. Hartman, J. Kurzweil, J. P. LaSalle, Solomon Lefschetz, N. Levinson, J. Moser, N. Onuchic, M. Peixoto, and S. Smale.

The International Symposium on Differential Equations and Dynamical Systems was held at the University of Puerto Rico, Mayaguez, Puerto Rico, from December 27 to 30, 1965, and was sponsored by the United States Air Force Office of Scientific Research, the University of Puerto Rico, and Brown University.

The complete list of papers appears below: