G. I. Marchuk — Editor

OPTIMIZATION TECHNIQUES

(IFIP Technical Conference Novosibirsk, July 1—7, 1974)

Lecture Notes in Computer Science 27
Springer-Verlag, Berlin-Heidelberg-New York, 1975, 508 + VII pp.

The proceedings contain papers presented at the Conference. These papers are collected according to the following topics: System Modelling and Identification (17 papers); Optimal Control (15 papers); Mathematical Programming and Numerical Algorithms (26 papers); Theory of Games (12 papers); In these last topics 11 papers are devoted to differential games. There are a few papers on economic problems: Key Problems in the Theory of Centralized Interaction of Economic Systems (K.A. Bagrinovsky); Dynamic Models of Technological Changes (L.V. Kantorovich, V.I. Zhgamov); A System of Models of Output Renewal (N.B. Mironosetskii); Satisficing (Roy Radner); Some Methods for Numerical Solution of Optimal Models in Spatial-Production Planning (A.E. Bakletin).

Several papers on numerical algorithms in mathematical programming may also be of interest for economists: Dual Direction Methods for Function Minimization (Yu. Danilin); Implementation of Variable Metric Methods for Constrained Optimization Based on an Augmented Lagrangian Functional (N. Engersbach and W. Gruver); Adaptive Monte Carlo Method for Solving Constrained Minimization Problems in Integer Nonlinear Programming (M. Ichimura and K. Wakimoto); On Bayesian Methods for Seeking the Extremum (J. Machus); A New Heuristic Method for General Mixed Interger Linear Programs: A report on work in progress (R. Rutledge).

Let us remark also the paper: Equilibrium Situations in Games with a Hierarchical Structure of the Vector of Criteria (Yu. Germeier and I. Vatel).

It is remarkable that the proceedings of the Conference are made available in such short time.

A. Halanay