

PREFACE

The Stefan Banach International Mathematical Center was set up in 1972 and is a joint enterprise of the Academies of Sciences of Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Rumania and the USSR. The purpose of the Center is to organize long-term (3–6 month) research and training activities called semesters, with participants from all over the world. The idea is to create opportunities for prolonged personal contacts between specialists with common scientific interests and to stimulate research and international cooperation.

Six such semesters have been completed so far and the results are very promising.

Each semester yields a great deal of written material: lecture notes as well as original papers completed and presented at the semester and also papers prepared during the authors' stay at the Center. Some semesters end with an international working conference.

Owing to the generous support of the Polish Academy of Sciences, the Institute of Mathematics has been able to set up this series in order to publish selected materials from each of the semesters organized at the Center.

The first volume, which we are now presenting to the public, consists of lectures delivered at a working conference at Zakopane, January 7–14, 1974, which concluded the second consecutive semester on the Mathematical Theory of Optimal Control.

The semester began on September 15, 1973 and lasted till January 15, 1974. There were 50 participants and 58 visitors coming from eleven countries.

The international organizing committee consisted of G. I. Gamkrelidze (chairman), G. I. Charatišvili, Z. Ciesielski, N. N. Krasovskii, F. Miščenko, C. Olech, L. S. Pontriagin, S. Rolewicz, and U. A. Rosanov.

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Czesław Olech