

INTRODUCTION

This volume contains the refereed proceedings of the International Conference on Fixed Point Theory and Its Applications which took place at the Mathematical Research and Conference Center, Będlewo, Poland, on August 1–5, 2005. There were 59 participants from 17 countries. This conference was organized by Professor Andrzej Granas and dedicated to the memory of Professor James Dugundji (1919–1985). The following text taken from the preface to the monograph *Fixed Point Theory* (2nd edition, Springer, 2003) by A. Granas and J. Dugundji is a brief note about the life and work of Professor James Dugundji.

“Jim Dugundji received his B.A. degree from New York University in 1940 and, for the next two years, studied at the University of North Carolina. After serving in the US Air Force from 1942 to 1946 he enrolled at the Massachusetts Institute of Technology, where he earned his Ph.D. in 1948 under Witold Hurewicz. Since 1948, Jim Dugundji taught at the University of Southern California in Los Angeles, where he became a full professor in 1958. For many years he served as one of the editors of the *Pacific Journal of Mathematics* and of *Topology and its Applications*.

While Dugundji’s mathematical work lay mainly in the field of topology, he also contributed to dynamical systems and functional analysis, and to problems in applied mathematics (electrical engineering, geology, and theoretical chemistry). Among his books are *Topology* (Allyn and Bacon, 1965) and *Perspectives in Theoretical Stereochemistry* (Springer, 1984), the latter written with I. Ugi, R. Kopp and D. Marquarding.

Jim Dugundji’s mathematical publications are marked by their lucidity and frequently by the decisiveness of his results. His work was, in fact, in many ways an expression of his character. Although he was self-effacing and lacking in any wish for self-advancement, he was totally independent and would not tolerate anything which he considered second best. He spent his life for science’s sake, aware of the sacrifice and dedication this requires, and what he asked from himself—which was quite a lot—he expected from others. Man of high integrity and moral strength, he had a great sensitivity, and all who were close to him could testify to his caring concern.”

Most of the papers that appear in this volume originated from the lectures delivered at the conference itself, while others were written in the wake of discussions held during the conference. Some of the lectures described results that had already been submitted

elsewhere and therefore could not be included in this volume. All the papers were carefully refereed by experts and subsequently revised.

The field of fixed point theory continues to be very active. A glance at the table of contents of this volume will reveal not only a wide spectrum of topics pertaining to both metric and topological fixed point theories, but also their diverse applications to other areas such as ordinary and partial differential equations. Thus one encounters papers that deal, for instance, with boundary value problems, contractive conditions, degree theory, homology theory, minimax theorems, nonexpansive retractions, set-valued mappings, the theory of selections, and wave equations.

We are very grateful to the speakers and the participants, to the authors who graciously agreed to take all the comments and suggestions made by the referees and the editors into account, and to the referees who generously provided high-quality expert advice that greatly enhanced the value of the volume.

Many thanks are also due to the staff members at the Będlewo Conference Center for their organizational assistance, without which the conference could have never been as successful as it was. Also, we are especially grateful to Dr. Jan Krzysztof Kowalski for his invaluable help in the preparation of this volume for publication. Finally, we are indebted to the Banach Center for its continued kind support of this project.

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