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Proceedings of the Fourteenth Biennial Seminar
of the Canadian Mathematical Congress
University of Western Ontario, August 12-25, 1973

Part I

Edited by Bruce J. Kirby



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PREFACE

This work (in two parts), Lecture Notes in Economics and Mathematical Systems, Volume 105 and 106, constitutes the Proceedings of the Fourteenth Biennial Seminar of the Canadian Mathematical Congress, which was held from August 12 to August 25, 1973 at the University of Western Ontario, London, Ontario.

The Canadian Mathematical Congress has held Biennial Seminars since 1947, and these have covered a wide range of topics. The Seminar reported in this publication was concerned with "Optimal Control Theory and its Applications", a subject chosen for its active growth and its wide implications for other fields. Both these aspects are exemplified in these Proceedings.

Some lectures provided excellent surveys of particular fields whereas others concentrated on the presentation of new results.

There were six distinguished Principal Lecturers: H.T. Banks, A.R. Dobell, H. Halkin, J.L. Lions, R.M. Thrall and W.M. Wonham, all of whom gave five to ten lectures during the two weeks of the Seminar. Except for Dr. Dobell's, these will all be found in Volume 105.

Besides the Principal Lecturers there were three Guest Lecturers: M.C. Delfour, V. Jurdjevic and S.P. Sethi, who presented substantial bodies of material in two or three lectures and which are included in Volume 106.

Many of the participants also spoke and reports of most of these have also been included (Volume 106).

A Seminar such as this one, involving over seventy participants and lecturers for an extended period, is a major undertaking.

IV

Our gratitude for its success is due to the Programme Committee consisting of

Colin W. Clark (U.B.C.)
M.N. Oguztorelli (U. of Alberta)
L.F.S. Ritcey (U. of Western Ontario)
F. Stenger (U. de Montréal)
and W.R.S. Sutherland (Dalhousie University).

The Local Arrangements Committee, chaired by Dr. Ritcey, provided excellent academic and social facilities for us, as did the staff of the Mathematics Department of U.W.O.

Thanks should also be extended to Dr. John J. McNamee, Executive Director of the Canadian Mathematical Congress; and to Mrs. Eileen M. Wight of Queen's University for the excellent, but onerous, task of typing the manuscripts.

B.J. Kirby,
Chairman, Programme Committee.

Queen's University,
Kingston, Ontario, Canada.
October 1974

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