



PREFACE: MATHEMATICAL ECONOMICS, PART II

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This special issue on Mathematical Economics is dedicated to Professor M. Ali Khan on the occasion of his 70th birthday.

M. Ali Khan is Abram Hutzler Professor of Political Economy at the Johns Hopkins University, working in mathematical economics. Professor M. Ali Khan made significant contributions to this area of research using methods of nonstandard analysis (Loeb spaces), nonsmooth analysis and optimization (Mordukhovich-Ioffe cones), and stochastic processes (law of large numbers with a continuum of random variables). In general equilibrium theory he studied models with a representative agent, as well as those with a finite number and a continuum. In growth theory he obtained significant results on the Robinson-Solow-Srinivasan model, the Robinson-Shinkai-Leontief model, and on the Mitra-Wan forestry model. His work has had great impact on research in mathematical economics. In part II of this special issue we present papers authored by a selected group of experts in the area of mathematical economics. Most of the papers collected here have been contributed by former students, collaborators, friends and colleagues of Ali's, who were influenced by his scientific work. Part II of this special issue contains ten papers contributed by researchers in mathematical economics from Australia, Brazil, France, Israel, Italy, Japan, Singapore and the USA.

These papers cover a wide spectrum of important problems and topics of current research interest, including control theory in infinite dimension for the optimal location of economic activity, Fatou's lemma for unbounded Gelfand integrable mappings, optimal growth in the two-sector RSL model with capital-intensive consumption goods, formula of the overtaking optimal solution for a growth model with AK technology, optimal dynamic perimeter control with virtual queue, convergence and stability of Walrasian equilibrium under asymmetric information, large individualized and distributionalized exchange economies with infinitely many commodities, transferable-utility β -core of discontinuous games, a principal-agent relationship with no advantage to commitment and strongly agreeable programs for the Robinson-Solow-Srinivasan model.

Therefore we feel that this special issue will be highly important for many mathematicians and applied scientists, who are interested in recent developments in analysis and mathematical economics, as well as in their numerous applications.

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