

Editorial

This issue contains contributed papers of selected speakers of the International Conference “Probability, Reliability and Stochastic Optimization” (PRESTO-2015). The conference was held on 7–10 April 2015 at Taras Shevchenko National University of Kyiv, Ukraine. It was dedicated to the anniversaries of prominent scientists: 90th anniversary of V.S. Korolyuk, 80th anniversary of I.M. Kovalenko, 75th anniversary of P.S. Knopov, and 75th anniversary of Yu.V. Kozachenko.

The conference covered a wide range of research areas: probability, mathematical statistics, theory of stochastic processes and fields, fractional and multifractional processes, fractal analysis, stochastic analysis, stochastic differential equations, stochastic models of evolution systems, stochastic reliability theory, information security, queuing theory, risk processes, actuarial and financial mathematics, and so on. Over 170 scientists from 16 countries took part at the conference, including both top-level specialists and young researchers.

We take this opportunity to thank all the participants of the conference and to express our profound admiration and respect to the scientists to whom the conference was devoted, which all are outstanding mathematicians and remarkable personalities.

Volodymyr Korolyuk. A full member of the National Academy of Sciences of Ukraine, Doctor of Sciences in Physics and Mathematics (Habilitation), an eminent mathematician, who made significant contribution to probability theory, mathematical statistics, and cybernetics. Korolyuk was one of the first scientists in Ukraine who recognized the theoretical and practical importance of semi-Markov processes and drew attention of other mathematicians to the investigation of these processes and their applications. He developed the methods of factorization and singular perturbation and applied them to the study of Markov and semi-Markov random evolutions. His recent long-year studies in collaboration with Prof. N. Limnios have been concerned to phase merging and resulted in publishing their joint monograph “Stochastic systems in merging phase space”. Korolyuk’s scientific achievements were recognized by numerous awards, including the USSR State Prize, the Glushkov Prize,

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the Bogolyubov Prize, the title of Honored Personality of Science and Technics of Ukraine, the Prize of the National Academy of Sciences of Ukraine, the M.V. Ostrogradsky Medal, and the State Prize of Ukraine in Science and Technology. 42 students defended their PhD theses and 14 Doctoral theses under his supervision. Korolyuk is an author of about 300 research articles, 22 monographs, and 20 textbooks.

Igor Kovalenko. A full member of the National Academy of Sciences of Ukraine, Doctor of Sciences in Physics and Mathematics, Doctor of Technical Sciences. In over 55 years of scientific activity, he succeeded in solving numerous problems from different areas of applied probability and mathematical statistics. He published over 20 monographs and about 300 scientific articles. Kovalenko pioneered the development of the modern mathematical theory of reliability. His results in this field have entailed the appearance and development of numerous new areas of research, which made him world famous and generally recognized. This recognition comes despite the fact that the access to a great part of his scientific works, related to information security, was restricted during the Soviet time. Kovalenko has generously shared his ideas with more than 40 his followers. He was awarded the State Prize of the USSR, the State Prize of Ukraine (twice), the Glushkov Prize, and the Mikhalevich Prize.

Pavel Knopov is a famous and world-wide recognized specialist in the field of computer science, statistical decision theory, and optimal control of stochastic systems. His scientific research is related to the problems of inaccurate information processing under conditions of incomplete data for the purpose of recognition, identification of object states and their control, mathematical problems of risk theory, and its applications in various fields of economy and technology. Doctor of Sciences (1986), Professor (1998), Corresponding member of the National Academy of Sciences of Ukraine (2012), Head of the Department of Mathematical Methods of Operations Research of V.M. Glushkov Institute of Cybernetics of the National Academy of Sciences of Ukraine, Laureate of the State Prize of Ukraine in Science and Technology, and V.M. Glushkov Prize, awarded by Certificate of Honor of the Presidium of the National Academy of Sciences of Ukraine and by the Diploma of the Verkhovna Rada of Ukraine. Knopov is an author of over 200 scientific publications, including 11 monographs. A large number of Doctoral and PhD dissertations were prepared under his supervision.

Yuriy Kozachenko is a world-famous and distinguished specialist in the theory and modeling of stochastic processes in functional spaces, one of the founders of the theory of sub-Gaussian and φ -sub-Gaussian stochastic processes. His research interests include: analytic properties of stochastic processes, estimation of functionals of stochastic processes, stochastic processes in Orlicz spaces, pre-Gaussian and sub-Gaussian processes, equations of mathematical physics with random initial conditions, modeling and computer simulation of stochastic processes with given accuracy and reliability, wavelet expansions, statistics of stochastic processes. Kozachenko is an author of over 300 scientific articles, several textbooks, and 7 monographs, including "Metric Characterization of Random Variables and Random Processes" (together with V. Buldygin). Doctor of Sciences in Physics and Mathematics, Professor Kozachenko has been working at Taras Shevchenko National University of Kyiv since 1967. He generously shares his deep and wide-ranging knowledge with students and colleagues. Under his supervision, 39 PhD theses and 5 Doctoral theses were

defended. Kozachenko's scientific achievements were marked by numerous awards, including the title of Honored Personality of Science and Technics of Ukraine, the Krylov Prize of the Presidium of the National Academy of Sciences of Ukraine, and the State Prize of Ukraine in Science and Technology.

All articles published in this issue have undergone the usual peer-reviewing process to maintain high standards of regular published issues of the journal.

We would like to thank all the authors who contributed to this special issue and the referees for their valuable work during the reviewing process.

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