

ROBUST 2022 (Volyně) 22nd Event of International Statistical Conference

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The 22nd event of the well-established biennial statistical conference ROBUST 2022 took place in Volyně nearby Strakonice (Czech Republic) during 12–17 June 2022.² It was organised by joint effort of the Expert Group of Computational Statistics of the Czech Mathematical Society (Section of the Union of Czech Mathematicians and Physicists), Department of Probability and Mathematical Statistics of the Faculty of Mathematics and Physics, Charles University, Prague and the Czech Statistical Society. The conference took place in the buildings of the Technical College Volyně specialised in wood processing and wooden buildings. It is important to note that 21st ROBUST scheduled in Bardějov (Slovakia) was postponed several times because of Covid-19 pandemics and finally due to relative proximity of the battlefields of the conflict in Ukraine. Persistent chief ROBUST organisers decided to postpone it to the June of 2024.

In total, 78 participants from 5 countries presented and discussed contributions covering a broad spectrum ranging from theoretical statistics, probability and stochastic analysis, machine learning and computer science to applied statistics in several fields, including forestry, insurance and finance mathematics, medicine, health and epidemiology, metrology, traffic safety, online advertisement, and official statistics. Foreign participants came from Slovakia (12), Switzerland (2), the USA (1), and Nigeria (1). The idea behind the ROBUST conferences has always been to bring together statisticians of all generations and all fields from different Czech and Slovak institutions, Czech and Slovak experts living abroad to enable the exchange of ideas and to provide them with interdisciplinary insight into the research in statistics.

Five invited lectures were delivered. The leading expert in supercomputing, prof. George Ostrouchov (Oak Ridge National Laboratory and University of Tennessee, currently Fulbright Scholar at Faculty of Mathematics and Physics, Charles University, Prague) delivered a four-hour tutorial on high performance computing with R, utilising his deep knowledge of both theory and practical implementation (including long-term engagement in Ostrava supercomputer project IT4).

Dr. Pavel Charamza presented a broad range of real life implementation of statistical methods in credit risk, public opinion polls, and new media. He discussed the application of commonly recommended statistical methods and use of machine learning techniques.

Doc. Arnošt Komárek (Department of Probability and Mathematical Statistics, Faculty of Mathematics and Physics, Charles University, Prague) reflected his experience as a publicly speaking statistician during the Covid-19 pandemics. Main idea of the talk that statistician stood quiet and let other specialists (like data scientists, mathematical biologists) to "steal" statistics provoked a very lively discussion in the audience.

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² More at: <<https://robust.nipax.cz>>.

Doc. Jan Kolářek (Department of Statistics and Mathematics, Faculty of Science, Masaryk University in Brno) delivered a functional data analysis. It was focused on an important modification for the real life setting - irregularly observed data.

Dr. Lukáš Lafférs (Department of Mathematics of the Faculty of Natural Sciences at the Matej Bel University in Banská Bystrica, Slovakia) provided an interesting presentation of a causal machine learning methodology. The first part was focused on presentation of this novel method. The second part was focused on applications of an economic policy assessment. The most interesting case study dealt with an assessment of the effects of interventions (for example, retraining courses provided by an employment department) for case of high dimensional data.

In this Conference, there is a long-term tradition of participation of doctoral and master degree students in the dedicated section, who presented 17 posters. Prizes were awarded in two categories: Master and First-Year Doctoral Students and Advanced Doctoral Students. The prizes were sponsored, as usual, by RSJ Securities, a.s., and RSJ Foundation. Conference fees for many participants (mostly master and first-year doctoral students) were sponsored, as in the past conferences, by RSJ and the Czech Statistical Society.

The Editor-in-Chief of the *Statistika: Statistics and Economy Journal* kindly invited participants to submit their papers on relevant topics to the Journal.