

EDITORIAL

In this specialized volume of *Kybernetika* dedicated to the memory of Professor Gavalec, we have collected some works on tropical mathematics and relevant areas, with the emphasis on particular topics to which Professor Gavalec made prominent contribution. Thus, tropical and fuzzy interval analysis is one of the main research themes featuring in the volume. One of the papers on this topic, co-authored by Professor Gavalec himself, is discussing generalized eigenvectors of interval fuzzy matrices. Another paper on tropical interval analysis (by Khaleghzade et al.) is introducing multi-linear systems for tensors in max-plus algebra and developing their application to job shop problem. Overall, the present volume offers a broad selection of current research themes in tropical mathematics, such as: tropical linear algebra and its extensions, tropical algebraic geometry, tropical optimization with applications in operations research, fuzzy cones and fuzzy relations, among some other topics. We hope that the wide readership of the journal *Kybernetika* will benefit from the collected research works on tropical mathematics and its applications published in this volume.

The volume has been edited by Aljoša Peperko, Daniela Ponce and Sergej Sergeev. Special thanks are also due to Ján Plavka and Tatiana Gavalcová for their substantial contribution to writing the obituary to Professor Martin Gavalec.

January, 2023.

Aljoša Peperko, Faculty of Mechanical Engineering, University of Ljubljana, Aškerčeva 6, SI-1000 Ljubljana, Slovenia, and Institute of Mathematics, Physics and Mechanics, Jadranska 19, SI-1000 Ljubljana. Slovenia.

e-mail: Aljosa.Peperko@fs.uni-lj.si

Daniela Ponce, University of Hradec Králové, Faculty of Informatics and Management, Rokitanského 62, 500 03 Hradec Králové. Czech Republic.

e-mail: daniela.ponce@uhk.cz

Ján Plavka, Technical University of Košice, Faculty of Electrical Engineering and Informatics, Nemcovej 32, 042 00 Košice. Slovak Republic.

e-mail: jan.plavka@tuke.sk

Sergej Sergeev, University of Birmingham, School of Mathematics, Birmingham, Edgbaston B15 2TT, UK.

e-mail: s.sergeev@bham.ac.uk