



Preface: Selected revised papers from the LION 15 conference

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This special issue of the *Annals of Mathematics and Artificial Intelligence* (AMAI) consists of selected thoroughly revised and extended journal papers originating from the LION 15 conference. This fiteenth installment of the conference series “Learning and Intelligent Optimization” was held entirely on-line June 20-25, 2021. We felt it was critically important to provide continuity of the LION conference series, amidst the devastating consequences of covid-19 to the careers PhD students, post-doctoral fellows and early-career scholars. To that effect, we also edited an LNCS volume [1] with selected revised papers from the LION 15 conference.

The LION 15 conference featured 3 plenary speakers:

1. Martin Charles Golumbic (University of Haifa, Israel), “ B_k -VPG graphs – the string graphs of paths on a grid”
2. Evangelos Kranakis (Carleton University, Canada) “Communication and Mobility in Optimization for Infrastructure Resilience”
3. Paul Spirakis (Univ.of Liverpool, UK and Univ. of Patras, Greece) “Temporal Networks and the impact of availability patterns”

and 2 tutorial speakers:

1. Rick Kuhn (NIST, USA) “Combinatorial Difference Methods in AI”
2. Franz Wotawa (Graz University of Technology, Austria) “On the use of ontologies for automated test suite generation”

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The abstracts of the above 5 speakers are available on the conference webpage <https://lion15.sba-research.org/>.

We are indebted to SBA Research for providing reliable infrastructure to run the conference on-line. We are indebted to MATRIS Research Group for providing a team of tireless and dedicated volunteers that oversaw the smooth and seamless progression of the conference, during the entire duration of the conference.

Following the conference, authors of selected presentations were invited to submit full journal papers to this special issue of AMAI. After a rigorous refereeing process, 11 papers were accepted to be published.

We wish to express our heartfelt thanks to the authors for contributing their work, as well as the reviewers whose collected efforts resulted in keeping the quality of the contributions at the highest standards. We are extremely pleased to be able to deliver this special issue of AMAI in keeping with the tradition of many previous LION conferences.

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References

1. Learning and Intelligent Optimization 15th International Conference, LION 15, Athens, Greece, June 20–25, 2021, Revised Selected Papers Editors: Dimitris E. Simos, Panos M. Pardalos, Ilias S. Kotsireas, LNCS, volume 12931

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