


PREFACE

This issue of Logical Methods in Computer Science is composed of selected papers deriving from two workshops in the series “Continuity, Computability, Constructivity: from Logic to Algorithms”, one held at the University of Ljubljana, Slovenia on 2–6 September 2019 (CCC 2019) and the other held online from 31 August to 4 September 2020 (CCC 2020) due to the COVID-19 pandemic, but which was originally planned to take place at the University of the Algarve in Faro, Portugal.

The workshops were partially funded by the University of Ljubljana, the University of the Algarve, the Japan Society for the Promotion of Science (JSPS), as well as the European Union. They were the eighth and ninth workshops in the series “Continuity, Computability, Constructivity: from Logic to Algorithms”, which brings together researchers applying logical methods to the development of algorithms, with a particular focus on computation with infinite data, where issues of continuity, computability and constructivity play major roles. Specific topics include exact real number computation, computable analysis, effective descriptive set theory, constructive analysis, and related areas. The overall aim is to apply logical methods in these disciplines to provide a sound foundation for obtaining exact and provably correct algorithms for computations with real numbers and other continuous data, which are of increasing importance in safety critical applications and scientific computation.

At the same time, the conference was the annual meeting of the CID project, a research network between Europe, Chile, Japan, New Zealand, Russia, Singapore, South Africa, South Korea and the USA. The project received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 731143 .

The communications presented at CCC 2019 and CCC 2020 were very interesting and spanned the whole range of topics covered by the workshop series. This rich combination is reflected in the present special issue. We would like to thank all the CCC 2019 and CCC 2020 participants for being instrumental to the success of those events, and the authors of the papers in this special issue for their high quality contributions. We would also like to thank the programme committees of CCC 2019 and CCC 2020 for their excellent work and the referees of the papers submitted to the present special issue for their availability to review the papers in accordance with the usual rigorous standards set by *Logical Methods in Computer Science*. Finally, we are very grateful to the Editor-in-Chief and the Executive Editors of *Logical Methods in Computer Science* for the opportunity to publish this special issue of the journal.

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⟨CCC⟩ ⟨2019 and CCC 2020⟩ Guest Editors, November 2023

All articles have already been published in the regular issues of Logical Methods in Computer Science.