Fabian Lorig Emma Norling (Eds.)

# Multi-Agent-Based Simulation XXIII

23rd International Workshop, MABS 2022 Virtual Event, May 8–9, 2022 Revised Selected Papers



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#### **Preface**

This volume presents revised papers from the 23rd International Workshop on Multi-Agent-Based Simulation (MABS 2022), a two-day workshop collocated with the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2022). The workshop was originally planned to be held in Auckland, New Zealand, but due to COVID-19 related travel restrictions and for reasons of precaution, the event took place virtually during May 8–9, 2022.

The meeting of researchers from Multi-Agent Systems (MAS) engineering and researchers from the social, economic, and organisational sciences is extensively recognised for its role in cross-fertilisation. It has undoubtedly been an important source of inspiration for the body of knowledge that has been produced in the area. The MABS workshop series continues with its goal to bring together researchers interested in MAS engineering with researchers focused on finding efficient solutions to model complex social systems, in areas such as economics, management, and organisational and social sciences in general. More information about the MABS workshop series may be found at https://www.pcs.usp.br/~mabs/.

The workshop provides a forum for social scientists, MAS and AI researchers and developers, and simulation researchers to assess the current state of the art in the modelling and simulation of social systems and MAS, to identify where existing approaches can be successfully applied, to learn about new approaches and explore future research challenges, and to exchange ideas and knowledge in an inter-disciplinary environment.

This year's workshop was opened by a special session on "Simulations related to the crisis". A keynote talk on "Cognitive agents for policy making in the covid crisis?" was given by Frank Dignum from Umeå University, Sweden. The workshop was concluded with a panel discussion focusing on the topics of MABS 2022 as well as on hot topics and current challenges to be addressed in future editions of MABS.

For MABS 2022, 17 submissions were received and reviewed by at least three members of the Program Committee in a single-blind review process. Based on the provided reviews, the Program Chairs selected 11 submissions for presentation. After the workshop, the authors of these papers were invited to prepare a revised extended version of their manuscript, taking ideas, feedback, and discussions from the workshop into account. The revised articles were once again reviewed by the Program Chairs, to ensure the high quality of the published papers.

We are very grateful to all authors, presenters, members of the Program Committee, and all participants taking part in the discussions for their contribution to MABS 2022.

May 2022 Fabian Lorig Emma Norling

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