

## Preface

This volume contains the *Proceedings* of the 38th International Conference of Mathematical Foundations of Programming Semantics (MFPS XXXVIII), which was held as a hybrid conference with an in-person meeting at Cornell University in Ithaca, New York, a satellite event at IRIF in Paris, France, and a virtual event. The conference took place from July 11 to 13, 2022. The local organization was led by ourselves, with a great team of local organizers including Dexter Kozen and Alexandra Silva, whom we thank for their support. Many thanks go to the MFPS Organizers (Steering Committee), in particular Michael Mislove, for the guidance and financial support.

MFPS conferences are dedicated to the areas of mathematics, logic, and computer science that are related to models of computation in general, and to semantics of programming languages in particular. This is a forum where researchers in mathematics and computer science can meet and exchange ideas.

Topics include, but are not limited to, the following: bio-computation; concurrent qualitative and quantitative distributed systems; process calculi; probabilistic systems; constructive mathematics; domain theory and categorical models; formal languages; formal methods; game semantics; lambda calculus; programming-language theory; quantum computation; security; topological models; logic; type systems; type theory.

MFPS 2022 continued the tradition of having an exciting group of invited speakers and special session organizers and speakers: We enjoyed listening to four invited talks by Barbara König (University of Duisburg—Essen), Anca Muscholl (LaBRI, Université Bordeaux), Daniela Petrisan (IRIF, Université de Paris), and Frank Pfenning (Carnegie Mellon University). In addition, MFPS had three special sessions: (1) Species of Structures in Algebra, Computation, and Logic, organized by Marcelo Fiore (University of Cambridge) and Nicola Gambino (University of Leeds); (2) Relational Verification and Formal Reasoning, organized by Marco Gaboardi (Boston University); and (3) Algebraic Effects, organized by Ningning Xie (University of Cambridge).

The conference received submissions from Canada, Denmark, Estonia, France, Germany, Japan, Netherlands, Poland, Portugal, United Kingdom, and United States. There were 32 submissions, of which 17 were accepted. We thank all program committee members and external reviewers for their work. We also invited submissions from the invited speakers. The accepted and invited papers are published in this volume (in alphabetical order of the names of first authors). We hope you enjoy reading the papers in this volume as much as we enjoyed listening to the talks.

*Justin Hsu and Christine Tasson*  
*February 2023*

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