

Preface

The Symposium on Logical Foundations of Computer Science provides a forum for the fast-growing body of work on the logical foundations of computer science, e.g., those areas of fundamental theoretical logic related to computer science. The LFCS series began with “Logic at Botik,” Pereslavl-Zalessky, 1989, which was co-organized by Albert R. Meyer (MIT) and Michael Taitslin (Tver). After that, organization passed to Anil Nerode.

Currently LFCS is governed by a Steering Committee consisting of Anil Nerode (General Chair), Stephen Cook, Dirk van Dalen, Yuri Matiyasevich, Gerald Sacks, Andre Scedrov, and Dana Scott.

The 2018 Symposium on Logical Foundations of Computer Science (LFCS 2018) took place at the Wyndham Deerfield Beach Resort, Deerfield Beach, Florida, USA, during January 8–11, 2018. This volume contains the extended abstracts of talks selected by the Program Committee for presentation at LFCS 2018.

The scope of the symposium is broad and includes constructive mathematics and type theory, homotopy type theory, logic, automata and automatic structures, computability and randomness, logical foundations of programming, logical aspects of computational complexity, parameterized complexity, logic programming and constraints, automated deduction and interactive theorem proving, logical methods in protocol and program verification, logical methods in program specification and extraction, domain theory logics, logical foundations of database theory, equational logic and term rewriting, lambda and combinatory calculi, categorical logic and topological semantics, linear logic, epistemic and temporal logics, intelligent and multiple-agent system logics, logics of proof and justification, non-monotonic reasoning, logic in game theory and social software, logic of hybrid systems, distributed system logics, mathematical fuzzy logic, system design logics, and other logics in computer science.

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