Preface

This volume contains the proceedings of the 21st Conference on Concurrency Theory (CONCUR 2010), held in Paris, at Université Denis Diderot, August 31–September 3, 2010. CONCUR 2010 was organized by CNRS, INRIA, ENS Cachan and the Université Denis Diderot.

The purpose of the CONCUR conference is to bring together researchers, developers, and students in order to advance the theory of concurrency and promote its applications. The principal topics include basic models of concurrency such as abstract machines, domain theoretic models, game theoretic models, process algebras, and Petri nets; logics for concurrency such as modal logics, probabilistic and stochastic logics, temporal logics, and resource logics; models of specialized systems such as biology-inspired systems, circuits, hybrid systems, mobile and collaborative systems, multi-core processors, probabilistic systems, real-time systems, service-oriented computing, and synchronous systems; verification and analysis techniques for concurrent systems such as abstract interpretation, atomicity checking, model checking, race detection, pre-order and equivalence checking, run-time verification, state–space exploration, static analysis, synthesis, testing, theorem proving, and type systems; related programming models such as distributed, component-based, object-oriented, and Web services.

This edition of the conference attracted 107 submissions. We wish to thank all their authors for their interest in CONCUR 2010. After careful discussions, the Program Committee selected 35 papers for presentation at the conference. Each submission was refereed by three reviewers, who delivered detailed and insightful comments and suggestions. The conference Chairs warmly thank all the members of the Program Committee and all their referees for the excellent support they gave, as well as for the friendly and constructive discussions. We would also like to thank the authors for having revised the papers to address the comments and suggestions by the referees.

The conference program was enriched by the outstanding invited talks by:

- Frank S. de Boer (CWI, Amsterdam, The Netherlands)
- Maurice Herlihy (Brown University, Providence, USA)
- Holger Hermanns (Saarland University, Saarbrücken, Germany)
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- Anca Muscholl (LaBRI, University Bordeaux 1, France)
- Vladimiro Sassone (ECS, University of Southampton, UK)

The conference this year was co-located with the 17th International Symposium on Temporal Representation and Reasoning (TIME 2010). Additionally, CONCUR 2010 included the following satellite workshops:

- Structural Operational Semantics (SOS 2010)
- Expressiveness in Concurrency (EXPRESS 2010)
- Security in Concurrency (SecCo 2010)
- Foundations of Interface Technologies (FIT 2010)
- GASICS Workshop on Games for Design, Verification and Synthesis
- Foundations of Coordination Languages and Software Architectures (FOCLASA 2010)
- International Workshop on Distributed Open and Timed Systems (DOTS 2010)
- Young Researchers Workshop on Concurrency Theory (YR-CONCUR)

We would like to thank all the people who contributed to the success of CONCUR 2010, in particular the Organizing Committee and the administrative staff. We gratefully acknowledge the generous support from Digiteo, Région Île de France, CNRS, INRIA, ENS Cachan, the Ministère de l’enseignement supérieur et de la recherche, and the Université Denis Diderot - Paris 7. We are also grateful to Andrei Voronkov for his excellent EasyChair conference system, which we used for the electronic submission of papers, the refereeing process, and the Program Committee work.

June 2010

Paul Gastin
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Conference Organization

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