2nd International Conference on Formal Structures for Computation and Deduction

FSCD 2017, September 3–9, 2017, Oxford, UK

Edited by

Dale Miller

Editor

Dale Miller
Inria, UMR 7161, LIX, École Polytechnique
Palaiseau
France
dale@lix.polytechnique.edu

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Preface

The Second International Conference on Formal Structures for Computation and Deduction (FSCD 2017) was held 3–9 September 2017 in the Mathematical Institute at the University of Oxford, UK. This volume contains the proceedings of that meeting.

FSCD (`http://fscdconference.org/`) covers all aspects of formal structures for computation and deduction, from theoretical foundations to applications. It has been built on two communities: RTA (Rewriting Techniques and Applications) which goes back to 1983 and TLCA (Typed Lambda Calculi and Applications) which was founded in 1993. Since 2003, both conferences have co-located together for most meetings under the umbrella of the Federated Conference on Rewriting, Deduction and Programming. FSCD continues this tradition and broadens their scope to closely related areas in logics, proof theory, and new emerging models of computation.

FSCD 2017 has received 77 submissions with contributing authors from 23 countries. The program committee consisted of 31 members from 12 countries. Each submitted paper was reviewed by at least 3 members of the program committee with the help of 105 external reviewers. The reviewing process, which included a rebuttal phase, took place over a period of 8 weeks. A total of 29 regular papers were accepted for publication and are included in these proceedings. The FSCD program also featured four invited talks given by Marco Gaboardi (State University of New York at Buffalo), Georg Moser (University of Innsbruck), Alexandra Silva (University College London), and Christine Tasson (Université Paris Diderot).

FSCD 2017 was co-located with the 22nd ACM SIGPLAN International Conference on Functional Programming (ICFP 2017). In additional to the main program, the following 11 FSCD-associated workshops were held the day proceeding and the two days following the main conference.

- Trends in Linear Logic and Applications
- 31st International Workshop on Unification
- Trends in Mechanised Security Proofs, COST Action CA15123 EUTypes Workshop
- Third Workshop on Higher-Dimensional Rewriting and Applications
- Third Workshop on Homotopy Type Theory and Univalent Foundations
- First Annual Workshop on String Diagrams in Computation, Logic, and Physics
- Fourth Meeting on Structures and Deduction
- Sixth International Workshop on Confluence
- Twelfth International Workshop on Logical Frameworks and Meta-Languages – Theory and Practice
- Fourth International Workshop on Rewriting Techniques for Program Transformation and Evaluation
- IFIP Working Group 1.6: Rewriting

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Many people helped to make FSCD 2017 into a successful meeting. On behalf of the program committee, I thank the many authors of submitted papers for considering FSCD as a venue for their work and the invited speakers who have agreed to speak at this meeting. The program committee and the external reviewers deserve a big thanks for their carefully reviewing and evaluating of the submitted papers (the members of the program committee

and the list of external reviewers can be found in the following pages). The many associated workshops made a big contribution to the lively scientific atmosphere of this meeting and I thank the workshop organizers for their efforts to bring their meetings to Oxford. The EasyChair conference management system once again proved its usefulness at managing all the phases of putting together a program for this meeting.

The hard work of Sam Staton, the Conference Chair for FSCD 2017, is responsible for the smooth functioning of this year's meeting and for coordination with the ICFP 2017 organizers. Karen Barnes helped Sam a great deal with logistic matters. Jamie Vicary, the Workshop Chair, has taken care of the complex logistics involved with selecting and organizing the associated workshops. Jeremy Gibbons, the ICFP 2017 chair, has been very helpful and accommodating in the successful co-location of two conferences. The steering committee, lead by Luke Ong, provided valuable guidance in setting up this meeting and with ensuring that FSCD will have a bright and enduring future. Finally, I thank all participants of the conference for creating a lively and interesting event.

FSCD 2017 benefited from being held "in-cooperation" with the ACM SIGLOG and ACM SIGPLAN and from support from the British Logic Colloquium.

Dale Miller
Program Committee Chair of FSCD 2017

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