CALL FOR PAPERS

Second International Conference on

Formal Structures for Computation and Deduction (FSCD'17)

3 – 6 September 2017, Oxford, UK (co-located with ICFP 2017)

http://www.cs.ox.ac.uk/conferences/fscd2017/

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FSCD (http://fscdconference.org/) covers all aspects of formal structures for computation and deduction from theoretical foundations to applications. Building on two communities, RTA (Rewriting Techniques and Applications) and TLCA (Typed Lambda Calculi and Applications), FSCD embraces their core topics and broadens their scope to closely related areas in logics, proof theory and new emerging models of computation such as quantum computing or homotopy type theory. Suggested, but not exclusive, list of topics for submission are:

- 1. Calculi Lambda calculus Concurrent calculi Logics Rewriting systems Proof theory Type theory and logical frameworks
- Methods in Computation and Deduction

 Type systems
 Induction and coinduction
 Matching, unification, completion, and orderings
 Strategies
 Tree automata
 Model checking
 Proof search and theorem proving
 Constraint solving and decision procedures
- 3. Semantics Operational semantics Abstract machines Game Semantics Domain theory and categorical models Quantitative models
- 4. Algorithmic Analysis and Transformations of Formal Systems
 Type Inference and type checking
 Abstract Interpretation
 - Complexity analysis and implicit computational complexity
 - Checking termination, confluence, derivational complexity and related properties Symbolic computation
- 5. Tools and Applications Programming and proof environments
 Verification tools Libraries for proof assistants and interactive theorem provers Case studies in proof assistants and interactive theorem provers Certification

PUBLICATION The proceedings will be published as an electronic volume in the Leibniz International Proceedings in Informatics (LIPIcs) of Schloss Dagstuhl. All LIPIcs proceedings are open access.

SUBMISSION GUIDELINES Submissions can be made in two categories. Regular research papers are limited to 15 pages and must present original research which is unpublished and not submitted elsewhere. System descriptions are limited to 10 pages and must describe a working system which has not been published or submitted elsewhere. Submissions must be formatted using the LIPIcs style files and submitted via EasyChair. Complete instructions on submitting a paper can be found on the conference web site.

IMPORTANT DATES All deadlines are midnight anywhere-on-earth (AoE) and are firm; late submissions will not be considered.

Abstract Deadline:	7 April 2017	Notification:	14 June 2017
Submission Deadline:	14 April 2017	Camera-Ready:	7 July 2017
Rebuttal:	29–31 May 2017		

SPECIAL ISSUES Full versions of several accepted papers, to be selected by the program committee, will be invited for submission to a special issue of Logical Methods in Computer Science.

BEST PAPER AWARD BY JUNIOR RESEARCHERS The program committee will consider declaring this award to a paper in which all authors are junior researchers: a junior researcher is a person who is either a student or whose PhD award date is less than three years from the first day of the meeting.

FSCD STEERING COMMITTEE T. Altenkirch (Univ. Nottingham), S. Alves (Univ. Porto), G. Dowek, (Inria), S. Escobar (Univ. Politécnica de Valencia), M. Fernández (King's College London), H. Herbelin (Inria), D. Kesner (Univ. Paris), N. Kobayashi (Univ. Tokyo), L. Ong (Chair, Univ. Oxford), B. Pientka (McGill Univ.), R. Thiemann (Univ. Innsbruck).