PRELIMINARY CALL FOR PAPERS
Tenth International Conference on
Formal Structures for Computation and Deduction (FSCD 2025)
14-20 July 2025, Birmingham, UK

FSCD (`http://fscd-conference.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 logic, models of computation (e.g., quantum computing, probabilistic computing), semantics and verification in new challenging areas (e.g., blockchain protocols or deep learning algorithms).

Suggested, but not exclusive, topics for submission are:

1. Calculi: • Rewriting systems • Lambda calculus • Concurrent calculi • Logics • Proof theory • Type theory • Logical frameworks • Process algebras • Quantum calculi

2. 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 • 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 • Proof assistants and interactive theorem provers • Applications in industry • Applications in other sciences (e.g. biology) • Applications of formal systems in education

6. Modelling and verification in new challenging areas: • Certification • Security • Blockchain protocols • Databases • Deep learning and machine learning algorithms • Planning

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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 (excluding references), with the possibility to add an annex for technical details, e.g., proofs, and must present original research that is unpublished and not submitted elsewhere. System descriptions are also limited to 15 pages (excluding references) and must present new software tools in which FSCD topics play an important role, or significantly new versions of such tools. Submissions must be formatted using the LIPIcs style files and submitted via EasyChair: https://easychair.org/conferences/?conf=fscd2025

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

Titles and Short Abstracts:	10 February 2025	**Authors Notification:**	30 April 2025
Full Papers:	17 February 2025	**Final version for proceedings:**	14 May 2025
Rebuttal period:	7-11 April 2025		

BEST PAPER AWARD BY JUNIOR RESEARCHERS The programme committee will consider giving this award to a paper in which at least one author is a junior researcher, i.e. either a student or whose PhD award date is less than three years from the first day of the meeting. Co-authors should declare to the PC Chair that at least 50% of contribution was made by the junior researcher(s).

SPECIAL ISSUE Authors of selected papers will be invited to submit an extended version for a special issue of Logical Methods in Computer Science.