DCFS 2024
International Conference on
Descriptional Complexity of Formal Systems
Santa Clara University
June 25 - 27, 2024

The 26th International Conference on *Descriptional Complexity of Formal Systems* is organized by the Department of Mathematics & Computer Science of Santa Clara University in conjunction with the IFIP Working Group 1.02 "Descriptional Complexity."

Original research papers concerning the descriptional complexity of formal systems and structures (and its applications) are sought.

TOPICS include, but are not limited to:

Automata, grammars, languages and other formal systems; various modes of operations and complexity measures.

Succinctness of description of objects, state-explosion-like phenomena.

Circuit complexity of Boolean functions and related measures.

Size complexity of formal systems.

Structural complexity of formal systems.

Trade-offs between computational models and mode of operation.

Applications of formal systems -- for instance in software and hardware testing, in dialogue systems, in systems modeling or in modeling natural languages -- and their complexity constraints.

Co-operating formal systems.

Size or structural complexity of formal systems for modeling natural languages.

Complexity aspects related to the combinatorics of words.

Descriptional complexity in resource-bounded or structure-bounded environments.

Structural complexity as related to descriptional complexity.

Frontiers between decidability and undecidability.

Universality and reversibility.

Nature-motivated (bio-inspired) architectures and unconventional models of computing.

Blum Static (Kolmogorov/Chaitin) complexity, algorithmic information.

IMPORTANT DATES

Paper submission deadline: *March 1, 2024 (firm)*

Author notification: *April 2, 2024*

Camera-ready deadline: *April 11, 2024*

PAPER SUBMISSION

Submissions to DCFS must not exceed 12 pages in Springer-Verlag's Lecture Notes style including bibliography. If the authors believe that more details are essential to substantiate the main claims, they may include a clearly marked appendix that will be read at the discretion of the program committee. Simultaneous submissions of papers to any other conference with published proceedings or submitting previously published papers is not allowed. Papers should be submitted electronically as a PDF document to www.easychair.org/conferences/?conf=dcfs24. The proceedings will be published by Springer-Verlag in the series *Lecture Notes in Computer Science*. In addition, a special issue of *Journal of Automata, Languages, and Combinatorics* will be devoted to revised and extended versions of selected papers of the conference.

VENUE & DATES

The conference will be held in person at *Santa Clara University*, Santa Clara, CA, USA during *June 25-27, 2024*.

CONTACT

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