

First Announcement and Call for Papers

# The 10th International Symposium on Symbolic Computation in Software Science

*In the Era of Artificial Intelligence*

August 28-30, 2024

Tokyo University of Science

## Overview

SCSS 2024 is the 10th International Symposium on Symbolic Computation in Software Science. It aims to promote research on theoretical and practical aspects of symbolic computation in software science, combined with modern artificial intelligence techniques.

Symbolic computation is the science of computing with symbolic objects (terms, formulae, programs, representations of algebraic objects, etc.) Powerful algorithms have been developed during the past decades for the significant subareas of symbolic computation: computer algebra and computational logic. These algorithms and methods are successfully applied in various fields, including software science, which covers a broad range of software construction and analysis.

For more information see

[www.scss-conference.org/2024](http://www.scss-conference.org/2024)

## Invited Speakers

Wenshin Lee	University of Stirling, UK
Adrian Tate	NAG Ltd, UK
Stephen Wolfram	Wolfram Research, USA
Kazuhiro Yokoyama	Rikkyo University, Japan

## Scope

The topics of the symposium include, but are not limited to, the following:

- methods for large-scale computer understanding of mathematics and science
- program synthesis, transformation, and verification by AI methods
- automated reasoning and knowledge management
- theorem proving methods and techniques
- formal verification of AI and machine learning algorithms
- formal methods for the analysis of security
- symbolic methods for computational geometry and image processing
- symbolic methods for semantic web and cloud computing
- query languages for symbolic data

## Call for Papers

Original submissions are invited in two categories: regular research papers and work-in-progress papers.

Regular research papers must not exceed 15 pages in LNCS format including references and appendices. It is planned for the accepted papers to be published in a proceedings in the Springer LNAI series. Shorter papers on tools may be considered in this category and should include a URL from which the tool can be downloaded or accessed online.

Work-in-progress papers need not be original. Concurrent submission to another conference or a journal is allowed. Papers in this category are limited in length to 4 pages in the EPTCS format. The accepted ones will be presented at the symposium and will be included in the Computing Research Repository (CoRR).

Papers and abstracts are submitted via the EasyChair submission page:

[www.easychair.org/conferences/?conf=scss2024](http://www.easychair.org/conferences/?conf=scss2024)

## Important Dates

2024-02-23:	regular paper title and abstract submission
2024-03-01:	regular paper full submission
2024-05-01:	regular paper decision notification
2024-06-15:	regular paper camera-ready submission
2024-06-07:	work-in-progress papers submission
2024-06-21:	work-in-progress papers notification
2024-08-28:	conference begins

## Organization

*General Chair* Tetsuo Ida, University of Tsukuba

*Local Chair* Katsusuke Nabeshima, Tokyo U of Science

### *Program Committee*

Stephen Watt	University of Waterloo (Chair)
David Cerna	Czech Academy of Sciences
Changbo Chen	Chinese Academy of Sciences
Rachid Echahed	CNRS and University of Grenoble
David Jeffrey	University of Western Ontario
Cezary Kaliszyk	University of Innsbruck
Yukiyoshi Kameyama	University of Tsukuba
Laura Kovacs	TU Wien
Temur Kutsia	RISC, Johannes Kepler University
Christopher Lynch	Clarkson University
Yasuhiko Minamide	Tokyo Institute of Technology
Julien Narboux	LSIIT, CNRS and U. Strasbourg
Wolfgang Schreiner	RISC, Johannes Kepler University
Sofiene Tahar	Concordia University
Lihong Zhi	KLMM, Chinese Academy of Sciences