iFM 2019

15th International Conference on integrated Formal Methods

4-6 December, Bergen, Norway

About iFM

Applying formal methods may involve the usage of different formalisms and different analysis techniques to validate a system, either because individual components are most amenable to one formalism or technique, because one is interested in different properties of the system, or simply to cope with the sheer complexity of the system.

The iFM conference series seeks to further research into hybrid approaches to formal modelling and analysis; i.e., the combination of (formal and semi-formal) methods for system development, regarding both modelling and analysis. The conference covers all aspects from language design through verification and analysis techniques to tools and their integration into software engineering practice.

Scope

Areas of interest include but are not limited to:

- Formal and semi-formal modelling notations
- Combining formal methods
- Integration of formal methods into software engineering practice
- Program verification, model checking, and static analysis
- Theorem proving, decision procedures, SAT/SMT solving
- Runtime analysis, monitoring, and testing
- Program synthesis
- Analysis and synthesis of hybrid, embedded, probabilistic, distributed, or concurrent systems
- Abstraction and refinement
- Model learning and inference

Submission

iFM 2019 solicits high quality papers reporting research results and/or experience reports related to the overall theme of formal method integration.

We accept papers in the following categories:

(1) Regular papers (limit 18 pages) on
- original scientific research results
- tools, their foundation and evaluations
- applications of formal methods, including rigourous evaluations

(2) Short papers (limit 8 pages) on
- any subject of interest in the area of formal methods that can be described with sufficient detail within the page limit

(3) Journal First papers (limit 4 pages)
- summarizing recently published papers in high-quality journals

Visit the conference webpage for further details about the different categories.

The conference proceedings will be published in Springer's Lecture Notes in Computer Science series. A special issue of the Formal Aspects of Computing - FAOC journal (https://link.springer.com/journal/165) is planned for extended versions of selected papers from iFM 2019.

All accepted papers must be presented at the conference. Their authors must be prepared to sign a copyright transfer statement. At least one author of each accepted paper must register to the conference by the early registration date, and present the paper.

Important Dates

Extended abstract submission:
Monday, 01 Jul'19 (AoE)

Extended paper submission:
Friday, 05 Jul'19 (AoE)

Notification:
Monday, 16 Sep'19 (AoE)

Camera-ready:
Tuesday, 1 Oct'19 (AoE)

Satellite events:
2-3 December 2019

Main Conference:
4-6 December 2019

For more details, please visit http://ifm2019.hvl.no/ , or contact the organisers by ifm19@hvl.no

Western Norway University of Applied Sciences

Keynote speakers

Jean-Christophe Filliatre: CNRS, France

Tiziana Margaria: University of Limerick, Ireland

Corina Pasareanu: NASA Ames and Carnegie Mellon University, United States