



## CALL FOR PAPERS

### 19th Brazilian Symposium on Formal Methods (SBMF)

<http://sbmf2016.imd.ufrn.br/>

Promoted by the Brazilian Computer Society (SBC)

21st to 25th of November, 2016  
Natal, Rio Grande do Norte, Brazil

## IMPORTANT DATES

Abstract Submission Deadline: **July 15, 2016**

Paper Submission Deadline: **July 23, 2016**

Paper Acceptance Notification: September 9, 2016

Paper Camera-ready Version: September 16, 2016

## INTRODUCTION

SBMF 2016 is the nineteenth of a series of events devoted to the development, dissemination and use of formal methods for the construction of high-quality computational systems. It is now a well-established event, with an international reputation.

SBMF 2016 will take place in Natal, the capital of the state Rio Grande do Norte, that is located in the northeast region in Brazil. Natal is a portal of entry to South America: near to the point closest to Europe and Africa. Natal is a modern and lively town that emerged between a river and the sea; it is adorned by dunes and lots of green areas: a land of colours and flavours, where you find leisure and adventure. In Natal, it is Summer all year round, in a unique coastline of breathtaking beaches, lakes, wilderness, culinary, tours, art and culture, together with the great natural hospitality of its people.

Natal is one of the most popular tourist destinations in the world. It has around 800,000 inhabitants and receives more than 2 million / year tourists from Brazil and abroad. Visitors are dazzled by more than 400 km of Atlantic Coast strolling through beautiful beaches, many of which visited in thrilling buggy rides between sea, dunes and lagoons. It is known as the "Sun City", and is also remembered as "World Buggy Capital" and "Land of Shrimp". Natal is the city where a Brazilian dance, called Forró - "For All" - was born.

The aim of SBMF is to provide a venue for the presentation and discussion of high-quality work in formal methods. The topics include, but are not limited to, the following:

- techniques and methodologies, such as method integration; software and hardware co-design; model-driven engineering; formal aspects of popular methodologies; formal design; development methodologies with formal foundations; software evolution based on formal methods;
- specification and modeling languages, such as well-founded specification and design languages; formal aspects of popular languages; logics and semantics for programming and specification languages; code generation; formal methods and models for objects, aspects, component-based, real-time, hybrid, critical, and service-oriented systems;
- theoretical foundations, such as domain theory; type systems and category theory; computational complexity of methods and models; computational models; term rewriting; models of concurrency, security and mobility;
- verification and validation, such as abstraction, modularization and refinement techniques; program and test synthesis; correctness by construction; model checking; theorem proving; static analysis; formal techniques for software testing; software certification; formal techniques for software inspection;
- education, such as teaching of, for and with formal methods;
- applications, such as experience reports on the use of formal methods; industrial case studies; tool support.

## PAPER SUBMISSION

Papers with a strong emphasis on Formal Methods, whether practical or theoretical, are invited for submission. They should present unpublished and original work that has a clear contribution to the state of the art on the theory and practice of formal methods. They should not be simultaneously submitted elsewhere.

Papers will be judged by at least three reviewers on the basis of originality, relevance, technical soundness and presentation quality and should contain sound theoretical or practical results. Industry papers should emphasize practical application of formal methods or report on open challenges. Contributions should be written in English and be prepared using Springer's **Lecture Notes in Computer Science (LNCS) format**. Papers may not exceed **16 pages** (including figures, references and appendix). Accepted papers will be published, after the conference, in a volume of LNCS.

Every accepted paper **MUST** have at least one author registered in the symposium by the time the camera-ready copy is submitted; the registered author is also expected to attend the symposium and present the paper.

Papers can be submitted via the following link:  
<https://easychair.org/conferences/?conf=sbmf2016>

## KEYNOTE SPEAKERS

To be announced

## PROGRAM COMMITTEE CHAIRS

- Leila Ribeiro (UFRGS, Brazil)
- Thierry Lecomte (CleasSy System Engineering, France)

## PROGRAM COMMITTEE

- Adenilso Simão (ICMC/USP, Brazil)
- Alexandre Mota (UFPE, Brazil)
- Aline Andrade (UFBA, Brazil)
- Alvaro Moreira (UFRGS, Brazil)
- Ana Cavalcanti (University of York, UK)
- Ana Melo (USP, Brazil)
- Anamaria Moreira (UFRJ, Brazil)
- Andrea Corradini (Universita' di Pisa, Italy)

- Arend Rensink, (University of Twente, Netherlands)
- Arnaldo Moura (UNICAMP, Brazil)
- Augusto Sampaio (UFPE, Brazil)
- Christiano Braga (UFF, Brazil)
- Clare Dixon (University of Liverpool, UK)
- Daltro Nunes (UFRGS, Brazil)
- David Deharbe (ClearSy, France)
- David Naumann (Stevens Institute of Technology, USA)
- Ewen Denney (RIACS/NASA, USA)
- Fernando Orejas (UPC, Spain)
- Gabriele Taentzer (University of Marburg, Germany)
- Jim Davies (University of Oxford, UK)
- Jim Woodcock (University of York, UK)
- Jose Oliveira (Universidade do Minho, Portugal)
- Juliano Iyoda (UFPE, Brazil)
- Leila Ribeiro (UFRGS, Brazil) — PC co-chair
- Leila Silva (UFS, Brazil)
- Leonardo de Moura (Microsoft Research, USA)
- Luis Barbosa (Universidade do Minho, Portugal)
- Marcel Oliveira (UFRN, Brazil)
- Marcelo Maia (UFU, Brazil)
- Marcio Cornelio (UFPE, Brazil)
- Matthias Tichy (University of Ulm, Germany)
- Michael Butler (University of Southampton, UK)
- Michael Leuschel (University of Düsseldorf, Germany)
- Narciso Marti-Olliet (Universidad Complutense de Madrid, Spain)
- Neeraj Singh (McMaster University, Canada))
- Patricia Machado (UFCG, Brazil)
- Peter Larsen (Aarhus University, Denmark)
- Rachid Echahed (CNRS at University of Grenoble, France)
- Reiko Heckel (University of Leicester, UK)
- Rohit Gheyi (UFCG, Brazil)
- Rolf Hennicker (Ludwig-Maximilians-Universität München, Germany)
- Sergio Campos (UFMG, Brazil)
- Simone André da Costa Cavalheiro (UFPEl, Brazil)
- Sofiene Tahar (Concordia University, Canada)
- Stephan Hallerstade (Aarhus University, Denmark)
- Thierry Lecomte (ClearSy, France) — PC co-chair
- Tiago Massoni (UFCG, Brazil)

#### **STEERING COMMITTEE**

- Rohit Gheyi (UFCG, Brazil)
- David Naumann (Stevens Institute of Technology, USA)
- Juliano Iyoda (UFPE, Brazil)
- Leonardo de Moura (Microsoft Research, USA)
- Christiano Braga (UFF, Brazil)
- Narciso Martí-Olliet (Universidad Complutense de Madrid, Spain)
- Márcio Cornélio (UFPE, Brazil)
- Bill Roscoe (University of Oxford, UK)

Promotion:



Realization:

