# SPLat 2014
# First international workshop on
# Software Product Line Analysis Tools

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## ABSTRACT

The SPLat 2014 workshop aims to provide a platform for the presentation and positioning of formal analysis tools as used in Software Product Line Engineering for the identification of commonalities and differences of these tools as well as for the inventorying of challenges for their application. SPLat 2014 focuses on the underlying concepts and overall approach, in particular how to mitigate combinatorial explosion.

## Categories and Subject Descriptors

D.2.1 [**Software Engineering**]: Requirements/Specifications; D.2.2 [**Software Engineering**]: Design Tools and Techniques; D.2.4 [**Software Engineering**]: Software/Program Verification—*Formal methods, Model checking, Validation*; D.2.5 [**Software Engineering**]: Testing and Debugging

## General Terms

Software Product Lines, Formal Methods

## Keywords

Variability, Verification, State Space Explosion

## Workshop Summary

The Software Product Line Analysis Tools workshop in Florence, SPLat 2014, is devoted to the use of tool-supported formal analysis techniques in Software Product Line Engineering. The main theme is the mitigation of combinatorial explosion while analyzing software models with prominent variability. The workshop brings together a number of analysis methods, e.g. based on model checking, SAT-solving, or testing technology, to sketch the palette of techniques that is recruited to handle the commonalities and differences of individual products, and to establish properties at the level of the product line.

Papers presented at SPLat 2014 are of theoretical and applied interest and discuss a particular approach from a general perspective, rather than focused on the detailed inner workings and implementation aspects. The focus is on the explanation of the conceptual working in a simple setting and on a sketch of the potential success for wider application. The workshop exerts an exchange of and discussion on ideas and research questions concerning the presentation of feature-related concepts, and on successes and issues related to the applicability and scalability of tool-supported approaches to SPL validation and verification. The technical programme also includes positioning papers addressing the underlying philosophy, and a particular strength or a specific application range of an approach.

The SPLat 2014 workshop targets the exchange of arguments, beliefs and opinions and has the usual scheme of invited talks and paper presentations. The workshop has a one-day programme with technical contributions and two invited lectures planned. One by Stefania Gnesi (CNR/ISTI Pisa, Italy) on the role, prospects and challenges of formal methods in Software Product Line Engineering, and one by Tiziana Margaria (Universität Potsdam) on the application in SPLE of higher-order process modeling.

The program committee of SPLat 2014 responsible for paper selection consists of

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| Olivier Barais | Université de Rennes 1 |
| Don Batory | University of Texas at Austin |
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