

PNSE'16

International Workshop on Petri Nets and Software Engineering

Torun, Poland, June 20-21, 2016

a satellite event of Petri Nets 2016 and ACS D 2016
37th INTERNATIONAL CONFERENCE ON APPLICATION AND THEORY OF PETRI NETS AND CONCURRENCY
and

16th INTERNATIONAL CONFERENCE ON APPLICATION OF CONCURRENCY TO SYSTEM DESIGN

More information: <http://pn2016.mat.umk.pl/>

<http://www.informatik.uni-hamburg.de/TGI/events/pnse16/>

Contact e-mail: pnse16@informatik.uni-hamburg.de

Important Dates:

Deadline for **Abstracts** (full/short): **March 29th, 2016**

Deadline for **full papers**: **April 4th, 2016**

Deadline for **short papers**: **April 4th, 2016**

Notification of paper acceptance: **May 6th, 2016**

Deadline for posters: **May 9th, 2016**

Notification of poster acceptance: **May 17th, 2016**

Deadline for final revisions: **May 20th, 2016**

Scope

For the successful realization of complex systems of interacting and reactive software and hardware components the use of a precise language at different stages of the development process is of crucial importance. Petri nets are becoming increasingly popular in this area, as they provide a uniform language supporting the tasks of modeling, validation, and verification. Their popularity is due to the fact that Petri nets capture fundamental aspects of causality, concurrency and choice in a natural and mathematically precise way without compromising readability.

The workshop PNSE'16 (Petri nets and Software Engineering) will take place as a satellite event of Petri Nets 2016.

The use of Petri nets (P/T-nets, colored Petri nets and extensions) in the formal process of software engineering, covering modeling, validation, and verification, will be presented as well as their application and tools supporting the disciplines mentioned above.

Topics

We welcome contributions describing original research in topics related to Petri nets in combination with software engineering, addressing open problems or presenting new ideas regarding the relation of Petri nets and software engineering. Furthermore we look for surveys addressing open problems and new applications of Petri nets. Topics of interest include but are not limited to:

- Modeling
 - representation of formal models by intuitive modeling concepts
 - guidelines for the construction of system models
 - representative examples
 - process-, service-, state-, event-, object- and agent-oriented approaches
 - adaption, integration, and enhancement of concepts from other disciplines
 - views and abstractions of systems
 - model-driven architecture
 - modeling software landscapes
 - web service-based software development
- Validation and Execution
 - prototyping
 - simulation, observation, animation
 - code generation and execution
 - testing and debugging
 - efficient implementation

- Verification

- structural methods (e.g. place invariants, reduction rules)
- results for structural subclasses of nets
- relations between structure and behavior
- state space based approaches
- efficient model checking
- assertional and deductive methods (e.g. temporal logics)
- process algebraic methods
- applications of category theory and linear logic

- Application of Petri nets in Software Engineering, in particular the use of Petri nets in the domains of

- flexible manufacturing,
- logistics,
- telecommunication,
- big data,
- cyper-physical systems,
- internet-of-things,
- cloud computing,
- distributed systems,
- workflow management and
- embedded systems.

- Tools in the fields mentioned above

Submissions

The program committee invites submissions of full contributions (up to 20 pages) or short contributions (up to 5 pages). Ongoing work (up to 2 pages) can also be presented in a special poster session.

Papers should be submitted in electronic form (PDF) using the Springer LNCS-format (see <http://www.springer.de/comp/lncs/authors.html>). Submissions should include title, authors' addresses, E-mail addresses, keywords and an abstract. For your submission in PDF format please use the online conference management system at

<http://www.easychair.org/conferences/?conf=pnse16>

Just create a new account and then upload your paper. (Later you will be able to see your reviews there.) The papers will be peer reviewed by at least three members of the PC. Accepted contributions will be included in the workshop proceedings, which will be available at the workshop and published online.

Some of the best papers from the workshop will be invited for publication in a volume of the journal sub-line of Lecture Notes in Computer Science entitled "Transactions on Petri Nets and Other Models of Concurrency" (ToPNoC). The papers are expected to be thoroughly revised and they will go through a totally new round of reviewing as is standard practice for journal papers.

Papers from previous instances of this workshop (PNSE'07, PNDS'08, PNSE'09, PNSE'10, PNSE'11, PNSE'12, PNSE'13, PNSE'14 and PNSE'15) made it into ToPNoC volumes in the Springer LNCS series (volumes 5100, 5460, 5800, 6550, 6900, 7400, 7480, 8100 and 8910).

Chairs

Lawrence Cabac (University of Hamburg, Germany)

Lars Michael Kristensen (Bergen University College, Norway)

Heiko Rölke (DIPF, Germany)