

# Proceedings

## »PNSE'18«

International Workshop on  
Petri Nets and Software Engineering

Satellite event of the

39th International Conference on  
Application and Theory of Petri Nets  
and Concurrency

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18th International Conference on  
Application of Concurrency to  
System Design

Bratislava, Slovakia, June, 2018



Editors: Daniel Moldt,  
Ekkart Kindler and  
Heiko Rölke

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**N**ets and  
**S**oftware  
**E**ngineering  
**PNSE'18**

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## PNSE'18 Preface

These are the proceedings of the International Workshop on *Petri Nets and Software Engineering* (PNSE'18) in Bratislava, Slovakia, June 25–26, 2018. The workshop is co-located to the events of

- *Petri Nets 2018* – the 39th International Conference on Applications and Theory of Petri Nets and Concurrency and
- *ACSD 2018* – the 18th International Conference on Application of Concurrency to System Design.

More information about the workshop can be found at

<http://www.informatik.uni-hamburg.de/TGI/events/pnse18/>

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, synchronization and choice in a natural and mathematically precise way without compromising readability. The use of Petri nets (P/T-nets, Coloured Petri nets and extensions) in the formal process of software engineering, covering modeling, validation, execution, simulation and verification, is presented as well as their application in several domains and tools supporting the disciplines mentioned above.

For the workshop we have chosen Manuel Wimmer as the invited speaker with the talk on *On the Interplay between Model-Driven Engineering, Domain-Specific Languages, and Petri Nets*. Furthermore we also share the invited talk of the ATAED workshop by Stefanie Rinderle-Ma with the title *Challenges in Business Process Intelligence: Compliance, Collaboration, and Change*. We received fifteen high-quality contributions for these proceedings. The program now consists of five papers with long presentation, four papers with short presentation, one poster contribution and the invited talk of Manuel Wimmer.

The international program committee of PNSE'18 was supported by the valued work of Imke Helene Drave and Jan Henrik Röwekamp as additional reviewers. Their valuable work is highly appreciated. Furthermore, we would like to thank our colleagues in the local organization team at the Bratislava University, Slovakia for their support. The organizational/technical work in Hamburg was supported by Michael Haustermann, David Mosteller and Dennis Schmitz. Without the enormous efforts of authors, reviewers, PC members and the organizational teams, this workshop would not provide such an interesting booklet.

Thank you very much!

Daniel Moldt, Ekkart Kindler, Heiko Rölke  
Hamburg, June 2018

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