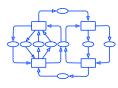


# Call for Papers and Announcement PETRI NETS 2022 43rd INTERNATIONAL CONFERENCE ON APPLICATION AND THEORY OF PETRI NETS AND CONCURRENCY

with a special track on Application of Concurrency to System Design (ACSD)

19-24 June 2022, Bergen, Norway





hvl.no/petrinets2022 | conf-2022.petrinet.net

Abstract submission	January 13, 2022 (*)
Submission of papers	January 20, 2022 (*)
Notification	March 5, 2022
Final version due	March 18, 2022 (*)
Registration for Tool Presentations	May 31, 2022
Petri nets course and PhD school	June 19–20, 2022
Workshops and Tutorials	June 20–21, 2022
Main Conference	June 22–24, 2022

(\*) The deadline is the end of day Anywhere on Earth (AoE)

The 43rd annual international Petri Nets conference will be organised by the Software Engineering Research Group at Western Norway University of Applied Sciences and will be held at Campus Bergen.

The language of the conference is English, and its proceedings will be published by **Springer-Verlag in Lecture Notes** in **Computer Science**. Papers presenting **original research on application or theory of Petri nets**, as well as contributions addressing topics relevant to the general field of **distributed and concurrent systems** are sought. Authors from the **applications of concurrency to systems design** are encouraged to submit to this special track.

All accepted papers will be considered for an *Outstanding Paper* award. Authors of **selected papers** presented at the conference will be invited to submit an extended version that will be further reviewed for inclusion into a special issue of **Fundamenta Informaticae**.

## Topics specific to Petri Nets

- Analysis and synthesis, structure and behaviour of nets
- System design and model-driven development using nets
- Relationships between Petri nets and other approaches
- Net-based semantical, logical and algebraic calculi
- Higher-level net models (e.g., coloured nets, timed nets)
- Stochastic net models
- Verification and model checking using nets
- Process discovery and conformance checking
- Computer tools for nets
- Standardisation of nets
- Experience reports describing applications of nets to different kinds of systems and application fields, e.g.:

flexible manufacturing systems real-time systems embedded systems biological systems health and medical systems Internet and Web services e-commerce and trading programming languages protocols and networks component based development

office automation
workflows
process mining
supervisory control
railway networks
environmental systems
hardware
telecommunications
performance evaluation
operations research

# General topics of interest related to concurrency

- Model checking and verification of distributed systems
- Verification of infinite-state or parametric systems
- Causality/partial order theory of concurrency
- Educational issues related to concurrency
- New developments in the theory of concurrency
- Modelling of hardware and biological systems

Special track on ACSD (Application of Concurrency to System Design) Both theoretical and applied research about formal approaches (in a broad sense) to designing computer systems that exhibit concurrent behaviour. The formal models of computation and concurrency for the above systems and problems are not limited by Petri nets, but also include models like dataflow models, communicating automata, process algebras, graph rewriting systems, state charts, MSCs, modal and temporal logics.

# Paper Submission

Two kinds of papers can be submitted

- Regular papers (max. 20 pages excluding references) describing original results pertaining to the development of the theory of Petri nets and distributed and concurrent systems in general, new results extending the applicability of Petri nets, or case studies, application and experience reports pertinent to the practical use of Petri nets and concurrency.
- Tool papers (max. 10 pages excluding references) describing a computer tool based on Petri nets (not an application of the tool or the theory behind the tool). The tool should be available for use by other groups (but not necessarily for free). The submission should indicate how the reviewers can get access to the tool (this must be for free). The tool will be demonstrated in the Tool Exhibition, in addition to being presented in a conference talk.

Papers must be written in English using the Springer LNCS format: http://www.springer.de/comp/lncs/authors.html, including line numbers (e.g. lineno LATEX package) and submitted electronically (as a PDF file) by the deadline indicated at the top of this Call for Papers using EasyChair: https://easychair.org/conferences/?conf=petrinets2022

## Tool Exhibition

An exhibition of Petri net tools will take place on Wednesday. It consists of informal demonstrations for small groups/individuals and there are no scheduled talks. Requests for participation in the tool exhibition must be sent to the Tool Exhibition chairs by the deadline stated at the top of this Call for Papers. They should include a link to the Web pages for the tool (or a short description of the tool). The demonstrators should bring their own laptops, while the organisers may be requested to give access to the Internet.

# Courses, Workshops and Tutorials

The main conference takes place from Wednesday 22 to Friday 24. The three days before the main conference also offer a wide range of activities. The **Petri Net Course** takes place from Sunday 19 to Tuesday 21. It offers a thorough introduction to Petri nets in four half-day modules on Sunday 19 and Monday 20, and a full-day tutorial module on Tuesday 21. For successful participation in the entire course, including preparation and examination, three credit points (ECTS) will be awarded. Each module of the course can also be taken separately, without any credit. Detailed descriptions of Workshops and Tutorials will be made available via the conference Web pages. It is also possible to arrange **Meetings** and **Courses** related to Petri Nets. Submissions for such activities must contain a 2–5 page description. They must be received by the Workshops chairs via email no later than January 13, 2022.

# Organisation

## Programme committee co-chairs

Laure Petrucci

University Sorbonne Paris Nord & CNRS, France

Luca Bernardinello

University de Milano Bicocca, Italy

Jörg Desel (ACSD track)

Fern Universität in Hagen, Germany

Alex Yakovlev (ACSD track)

University of Newcastle-upon-Tyne, UK

## Workshops co-chairs

Gianfranco Ciardo Iowa State University, USA Robin Bergenthum

Fern Universität, Germany

## General organising chairs

Lars Michael Kristensen

Western Norway University of Applied Sciences

Violet Ka I Pun

Western Norway University of Applied Sciences

#### Steering committee

W. van der Aalst, Germany

G. Ciardo, USA

J. Desel, Germany S. Donatelli, Italy

S. Haddad, France

K. Hiraishi, Japan

J. Kleijn, The Netherlands

F. Kordon, France

r. Kordon, France

M. Koutny, UK (chair)

L. M. Kristensen, Norway

C. Lin, China

W. Penczek, Poland

L. Pomello, Italy

W. Reisig, Germany

G. Rozenberg, The Netherlands

M. Silva, Spain

A. Valmari, Finland

A. Yakovlev, UK

## Programme committee

Ryszard Janicki, Canada

Elvio Amparore, Italy Abel Armas Cervantes, Australia Paolo Baldan, Italy Benoît Barbot, France Béatrice Bérard, France Didier Buchs, Switzerland Josep Carmona, Spain Raymond Devillers, Belgium Susanna Donatelli, Italy Boudewijn van Dongen, The Netherlands Javier Esparza, Germany David de Frutos Escrig, Spain Stefan Haar, France Xudong He, USA Loïc Helouet, France Marieke Huisman, The Netherlands

Anna Kalenkova, Australia
Jörg Keller, Germany
Ekkart Kindler, Denmark
Michael Köhler-Büssmeier, Germany
Irina Lomazova, Russia
Robert Lorenz, Germany
Roland Meyer, Germany
Lukasz Mikulski, Poland
Andrew Miner, USA
Marco Montali, Italy
Jaco van de Pol, Denmark
Artem Polyvyanyy, Australia
Pierre-Alain Reynier, France
Arnaud Sangnier, France
Natalia Sidorova, The Netherlands

Wlodek Zuberek, Canada