Call for Papers and Announcement
Petri Nets 2020

41st INTERNATIONAL CONFERENCE ON APPLICATION AND THEORY OF PETRI NETS AND CONCURRENCY

22–26 June 2020, Paris, France

Additional information about the conference will be published via http://conf-2020.petrinet.net

Contact: pn2020@petrinet.net

The 41st annual international Petri Nets conference will be organised by the LoVe (Logics and Verification) team of the computer science laboratory LIPN (Laboratoire d’Informatique de Paris Nord), University Paris 13 and CNRS, jointly with members of the Paris region MeFoSyLoMa group (Méthodes Formelles pour les Systèmes Logiciels et Matériels). The conference will take place in the conference area of Campus Condorcet, the new international research campus in humanities and social sciences in Paris. 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. 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.

General topics 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.

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 (coloured nets, timed nets, etc.)
- 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, environmental systems, hardware, telecommunications, railway networks, component based development, office automation workflows, process mining, supervisory control protocols and networks, Internet and Web services, e-commerce and trading, programming languages, performance evaluation operations research.
Paper Submission:

Two kinds of papers can be submitted:

- **Regular papers (max. 20 pages)** 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)** 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](http://www.springer.de/comp/lncs/authors.html) 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=petrinets2020](https://easychair.org/conferences/?conf=petrinets2020)

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 to Friday. The three days before the main conference also offer a wide range of activities. The **Petri Net Course** takes place from Sunday to Tuesday. It offers a thorough introduction to Petri nets in four half-day modules on Sunday and Monday, and a full-day tutorial module on Tuesday. 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.

Workshops take place on Monday and Tuesday. On Tuesday there will be two tutorials on applications of Petri nets and/or new developments presented by experts in the area. These tutorials can be followed independently or in combination with the Petri Net Course. 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 and Tutorials chairs via email no later than January 10, 2020.

Organisation

**Programme Committee co-chairs:**
- Ryszard Janicki, McMaster University, Canada
- Natalia Sidorova, Technische universiteit Eindhoven, The Netherlands

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**Programme committee:**
- Elvio Amácoro, Italy
- Paolo Baldan, Italy
- Benoît Barbot, France
- Didier Buchs, Switzerland
- Josep Carmona, Spain
- Isabel Demongodin, France
- 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
- Petr Jancar, Czech Republic

**Steering committee:**
- W. van der Aalst, Germany
- G. Ciardo, USA
- J. Dëséul, Germany
- S. Donatelli, Italy
- S. Haddad, France
- K. Hiraishi, Japan
- J. Kleijn, The Netherlands
- F. Kordon, France
- M. Koutny, UK (chair)
- L. M. Kristensen, Norway
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- J. Dëséul, Germany
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- 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

**General chairs:**
- Laure Petrucci & Étienne André, LIPN, CNRS, Université Paris 13, France

**Tool exhibition chairs:**
- Benoît Barbot, LAACL, Université Paris 12, France
- Alexandre Duré-Lutz, LRDE, EPITA, France

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