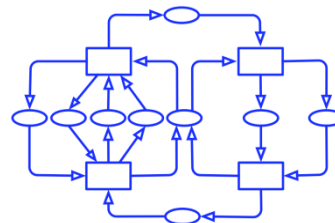**Call for Papers and Announcement**
Petri Nets 2019
40th INTERNATIONAL CONFERENCE
ON APPLICATIONS AND THEORY
OF PETRI NETS AND CONCURRENCY
Aachen, Germany, June 23-28, 2019

Additional information about the conference will be published via
http://pads.rwth-aachen.de/PetriNets2019/
Contact: ✉ pn2019@pads.rwth-aachen.de
The conference will be co-located with the
19th International Conference on
Application of Concurrency to System Design (**ACSD 2019**).

Important Dates:

Abstract submission	January 25, 2019 (*)
Submission of Papers	February 1, 2019 (*)
Notification	March 8, 2019
Final Version Due	April 2, 2019 (*)
Participation in Tool Exhibition	June 1, 2019
Workshops & Tutorials	June 23-25, 2019
Main Conference	June 26-28, 2019

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

The 40th annual international Petri Nets conference will be organized by the Process and Data Science (PADS) group at RWTH Aachen University, Aachen, Germany. The new PADS group was established in the context of Wil van der Aalst's Alexander von Humboldt Professorship. The conference will take place in the conference area of the Tivoli football stadium close to the city center of Aachen. 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 regular papers will be considered for an "Outstanding Paper" award. Some of the best papers will be invited, in an extended form, as submissions to a special issue of a well-established computer science journal.

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
- Modeling of hardware and biological systems

Topics specific to Petri nets

- Analysis and synthesis, structure and behavior 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 (colored nets, timed nets, etc.)
- Stochastic net models
- Verification and model checking using nets
- Process discovery and conformance checking
- Computer tools for nets
- Standardization of nets
- Experience reports describing applications of nets to different kinds of systems and application fields, e.g.:

flexible manufacturing systems	office automation
real-time systems	workflows
embedded systems	process mining
biological systems	supervisory control
health and medical systems	protocols and networks
environmental systems	Internet and web services
hardware	e-commerce and trading
telecommunications	programming languages
railway networks	performance evaluation
component-based development	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.

Submitted papers must:

- be contributions that have not been published elsewhere or submitted to other conferences/journals in parallel with this conference.
- clearly state the problem being addressed, the goal of the work, the results achieved, and the relation to other work.
- be in English and in the Springer LNCS format: http://www.springer.de/comp/lncs/authors.html.
- adhere to the page limit for the relevant category (see above).
- be 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=petrinets2019

The title page must:

- contain a short abstract and a classification of the topics covered, preferably using the list of topics above.
- clearly indicate whether the paper is submitted as a regular paper or tool paper.

Submissions violating the above requirements may be immediately rejected by the PC Chairs.

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 Chair 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 organizers 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 PC chairs via email no later than January 10, 2019.

History of the Conference:

The aim of the conference is to create a forum for discussing progress in the application and theory of Petri nets. Typically, the conferences have 100–150 participants – some of them coming from industry, the rest from universities and research institutions. The conference takes place at the end of June, in such a way that the last Friday in June closes the conference. The proceedings are published by Springer-Verlag as Lecture Notes in Computer Science https://www.springer.com/gp/computer-science/lncs).

1. 1980 Strasbourg, France
2. 1981 Bad Honnef, Germany
3. 1982 Varenna, Italy
4. 1983 Toulouse, France
5. 1984 Aarhus, Denmark
6. 1985 Espoo, Finland
7. 1986 Oxford, UK
8. 1987 Zaragoza, Spain
9. 1988 Venice, Italy
10. 1989 Bonn, Germany
11. 1990 Paris, France
12. 1991 Aarhus, Denmark
13. 1992 Sheffield, UK
14. 1993 Chicago, USA
15. 1994 Zaragoza, Spain
16. 1995 Torino, Italy
17. 1996 Osaka, Japan
18. 1997 Toulouse, France
19. 1998 Lisbon, Portugal
20. 1999 Williamsburg, USA
21. 2000 Aarhus, Denmark
22. 2001 Newcastle upon Tyne, UK
23. 2002 Adelaide, Australia
24. 2003 Eindhoven, The Netherlands
25. 2004 Bologna, Italy
26. 2005 Miami, USA
27. 2006 Turku, Finland
28. 2007 Siedlce, Poland
29. 2008 Xi'an, China
30. 2009 Paris, France
31. 2010 Braga, Portugal
32. 2011 Newcastle upon Tyne, UK
33. 2012 Hamburg, Germany
34. 2013 Milano, Italy
35. 2014 Tunis, Tunisia
36. 2015 Brussels, Belgium
37. 2016 Toruń, Poland
38. 2017 Zaragoza, Spain
39. 2018 Bratislava, Slovakia

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Other Major Activities of the Petri Net Community

Petri Net Newsletter

The newsletter is published twice a year by the Special Interest Group on Petri Nets and Related System Models of the Gesellschaft für Informatik. It contains articles, surveys, and state-of-the-art reports. Also, it contains work-in-progress papers, all kinds of announcements, programs and reports on meetings and activities, information on theses and new books, and abstracts of recent publications.

The executive editor is Robert Lorenz (✉robert.lorenz@informatik.uni-augsburg.de). Further information, as well as subscriptions forms, can be obtained from the Petri Net Newsletter website: http://www.informatik.uni-augsburg.de/pnnl/

Transactions on Petri Nets and Other Models of Concurrency (ToPNoC)

ToPNoC (http://www.springer.com/series/8379) is published by Springer-Verlag as a journal subline in Lecture Notes in Computer Science (LNCS). ToPNoC contains revised versions of some of the best papers from workshops and tutorials at the annual Petri net conferences, special sections/issues within particular subareas, and papers submitted directly to ToPNoC. For more information about ToPNoC please contact the editor-in-chief: Maciej Koutny (✉maciej.koutny@ncl.ac.uk).

Advanced Courses on Petri Nets

These courses are organized periodically in order to present the progress in Petri net research and applications. The 5th Advanced Course took place in Rostock, Germany, September 13 –24, 2010. Previously there have been Advanced Courses in Hamburg 1979, Bad Honnef 1986, Dagstuhl 1996 and Eichstätt 2003. The material from the last course has been published by Springer-Verlag as a special volume of ToPNoC:
http://www.springer.com/computer/swe/book/978-3-642-38142-3

Petri Net WWW and Petri Net Mailing

These electronic services are used to disseminate announcements, questions, bibliographies, tool information, addresses, and all other kinds of Petri-net related information. The services are maintained by the TGI group at University of Hamburg, Germany. More information can be obtained at the following addresses:

- ✉petriadm@informatik.uni-hamburg.de
- Web: http://www.informatik.uni-hamburg.de/TGI/PetriNets/

Aachen

Aachen is a historic city in North Rhine-Westphalia, Germany, at the point where Germany borders on Belgium and the Netherlands. Historically this spa-town was a prominent city, the place where the German Kings were crowned, and the residence of Charlemagne who still lies buried in the impressive cathedral he himself had built. The city has many historical sites that remind of those days, including medieval buildings, city gates, and beautiful fountains. Aachen is Germany's westernmost city. It lies near the borders with Belgium and the Netherlands and is nestled between the large national parks of the Eifel and the Ardennes. The city has a population of 260,000, which includes about 50,000 students and more than 4,000 academic staff from across the world. Its lively student community lends the city just as much character as its history. Aachen is famous for its Printen gingerbread, its hot springs, its Mardi Gras carnival and one of the world's largest equestrian tournaments. The historic city center and a wealth of bars, cafés, and restaurants, combined with the nearby nature parks, such as the Eifel, make Aachen a city where everyone feels at home.

The venue of the conference, the Tivoli football stadium, is located on the border of the city center. This beautiful venue will provide a unique atmosphere with great views and excellent conference facilities.

Process and Data Science (PADS) group

The Process and Data Science (PADS) group is one of the research units in the Department of Computer Science at RWTH Aachen University. The scope of PADS includes all activities where discrete processes are analyzed, reengineered, and/or supported in a data-driven manner. Process-centricity is combined with an array of Data Science techniques. The group has been established in 2018 in the context of the Alexander von Humboldt Professorship awarded to Prof.dr.ir Wil van der Aalst. The award is Germany's most prestigious and valuable prize for international researchers. The main research focus is on Process Mining (including process discovery, conformance checking, performance analysis, predictive analytics, operational support, and process improvement). This is combined with neighboring disciplines such as operations research, algorithms, discrete event simulation, business process management, and workflow automation.

RWTH Aachen University

Many new products and processes originate in Aachen. In the research laboratories and test rooms of RWTH, the first all-metal aircraft was developed, for example, as was the diesel soot filter. This is where the first wind tunnel stood and the first particle accelerator. This trend-setting innovative capacity and the practical technology transfer to the economic world have a long history in Aachen, the City of Science.

RWTH Aachen University is one of the strongest universities in Germany and its computer science program is consistently ranked top 3. The university is one of the eleven excellence universities in Germany hosting over 45,000 students and more than 6,000 scientists. As a whole, there are more than 60,000 students, and there is close cooperation with the industry. Visible evidence of this is the RWTH Aachen Campus that is being developed in close cooperation with industry and which is to form one of the largest research parks in Europe.

Over 2,000 years of city history meet 60,000 students

Aachen is well known for being home to the first UNESCO World Heritage Site in Germany - Aachen Cathedral - and the large number of young people, whom you see wherever you go. The historic center and the vibrant student life make Aachen a wonderful conference location. There are many attractions in Aachen. Located in the heart of the old city, Aachen Cathedral is one of the main attractions of Aachen. Its architecture and features still highlight the significance and imposing nature of the building, which was completed at the end of the 8th century at the request of Emperor Charlemagne. The Elisenbrunnen fountain is the symbol of Aachen as a spa and bathing city. Here, the hot springs, which were valued not only by Charlemagne, but also the Romans, can be seen bubbling up from below. The classicistic building with its two fountains is a popular meeting place. The historic façade of Aachen's spectacular town hall already shows the building's glorious history: 50 rulers, 31 of whom were crowned in Aachen. There are many more sights in the city. Moreover, the surroundings of Aachen (e.g., the Eifel) provide scenic villages and nature.

How to get to Aachen?

Aachen is conveniently located and has frequent train connections to Frankfurt, Cologne, Düsseldorf, Brussels, Paris, and Antwerp. The airports of Düsseldorf, Cologne, Maastricht-Aachen, and Brussels are easy to reach.