

**Call for Papers and Announcement**  
**Petri Nets 2018**  
**39<sup>th</sup> INTERNATIONAL CONFERENCE**  
**ON APPLICATIONS AND THEORY**  
**OF PETRI NETS AND CONCURRENCY**  
 Bratislava, Slovakia, June 24-29, 2018

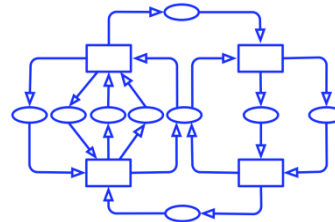
Additional information about the conference will be published via

<http://interes.institute/PetriNets2018/>

Contact: ✉ [pn2018@interes.institute](mailto:pn2018@interes.institute)

The conference will be co-located with the  
 19<sup>th</sup> International Conference on

Application of Concurrency to System Design (**ACSD 2019**).



**Important Dates:**

|                                  |                      |
|----------------------------------|----------------------|
| Abstract submission              | January 10, 2018 (*) |
| Submission of Papers             | January 15, 2018 (*) |
| Notification                     | March 1, 2018        |
| Final Version Due                | March 15, 2018 (*)   |
| Participation in Tool Exhibition | June 1, 2018         |
| Workshops & Tutorials            | June 24-26, 2018     |
| Main Conference                  | June 27-29, 2018     |

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

The 39<sup>th</sup> annual international Petri Nets conference will be organized by the Interes.Institute in Bratislava in cooperation with Faculty of Electrical Engineering and Information Technology and Faculty of Informatics and Information Technologies, Slovak University of Technology in Bratislava, Slovak Republic. The conference will take place at Hotel Austria Trend, Vysoka street 2A, 811 06 Bratislava, Slovak Republic. 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
- Modelling of hardware and biological systems

**Topics specific to Petri nets**

- System design using nets
- Analysis and synthesis, structure and behaviour of nets
- Relationships between Petri nets and other approaches
- Net-based semantical, logical and algebraic calculi
- Symbolic net representation (graphical or textual)
- Computer tools for nets
- Experience with using nets, case studies
- Higher-level net models
- Timed and stochastic 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.

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=petrinets2018>

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, 2018.

## 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 (<http://www.springer.de/comp/lncs/>).

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

## Organization

### Program Committee Co-chairs

Victor Khomenko  
School of Computing Science  
Newcastle University  
✉Victor.Khomenko@ncl.ac.uk

Olivier H. Roux  
Laboratoire des Sciences du Numérique  
Ecole Centrale de Nantes  
✉olivier-h.roux@ec-nantes.fr

### Workshop and Tutorial Co-chairs

Lars Michael Kristensen  
Faculty of Engineering,  
Bergen University College  
✉lmkr@hib.no

Lucia Pomello  
Dept. Computer Science, Systems  
and Communications  
Univ. degli Studi di Milano-Bicocca  
✉lucia.pomello@unimib.it

### Organizing Committee Chair

Gabriel Juhás  
Interes.Institute and  
Faculty of Electrical Engineering and  
Information Technology  
Slovak University of Technology  
✉juhas@interes.institute

### Tools Exhibition Chair

Milan Mladoniczky  
Interes.Institute and  
Faculty of Electrical Engineering and  
Information Technology  
Slovak University of Technology  
✉tools.pn2018@interes.institute

### Publicity Chair

L'udovít Molnár  
Interes.Institute and  
Faculty of Informatics and Information  
Technologies  
Slovak University of Technology  
✉publicity.pn2018@interes.institute

### Steering Committee

W. van der Aalst, The Netherlands  
J. Kleijn, The Netherlands  
L. Pomello, Italy  
G. Ciardo, USA  
F. Kordon, France  
W. Reisig, Germany  
J. Desel, Germany  
M. Koutny, UK (chair)  
G. Rozenberg, The Netherlands  
S. Donatelli, Italy  
L.M. Kristensen, Norway  
M. Silva, Spain  
S. Haddad, France  
C. Lin, China  
A. Valmari, Finland  
K. Hiraishi, Japan  
W. Penczek, Poland  
A. Yakovlev, UK

### Program Committee

W. van der Aalst, The Netherlands  
D. Buchs, Switzerland  
L. Cabac, Germany  
M. Colange, France  
J.M. Colom, Spain  
I. Demongodin, France  
D. Fahland, The Netherlands  
G. Geeraerts, Belgium  
H. Hansen, Finland  
P. Jancar, Czech Republic  
R. Janicki, Canada  
G. Juhas, Slovakia

V. Khomenko, UK (co-chair)  
J. Kleijn, The Netherlands  
F. Kordon, France  
L. Mikulski, Poland  
A. Miner, USA  
G.M. Pinna, Italy  
P. Poizat, France  
O.H. Roux, France (co-chair)  
P. Sobocinski, UK  
I. Virbitskaite, Russia  
M. Weidlich, Germany  
K. Wolf, Germany

### 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](mailto: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](mailto:maciej.koutny@ncl.ac.uk)).

#### Advanced Courses on Petri Nets

These courses are organised periodically in order to present the progress in Petri net research and applications. The 5<sup>th</sup> 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](mailto:petriadm@informatik.uni-hamburg.de)
- Web: <http://www.informatik.uni-hamburg.de/TGI/PetriNets/>

## Bratislava

Bratislava is the capital of Slovakia, and with a population of about 450,000, the country's largest city. The greater metropolitan area is home to more than 650,000 people. Bratislava is in south-western Slovakia, occupying both banks of the River Danube and the left bank of the River Morava. Bordering Austria and Hungary, it is the only national capital that borders two independent countries. It is only 62 kilometres from the border with the Czech Republic and only 60 kilometres from the Austrian capital Vienna. Bratislava has its own international airport and it is only about 45 kilometers from the Vienna international airport in Schwechat, less than one hour by a shuttle bus.

Bratislava is the seat of the Slovak president, the parliament and the Slovak Executive. It is home to several universities, museums, theatres, galleries and other important cultural and educational institutions.

The venue of the conference, the Austria Trend Hotel Bratislava, is located on the border of historic old-town of Bratislava. It offers 199 rooms of different categories, and 333 square meters of combined floor space of four conference meeting rooms, which can accommodate up to 350 people.

### Interes.Institute

Interes.Institute stands for Information Technology Research Institute. Interes.Institute was founded to create a forum for research, education and innovations in ICT with focus on application of ICT across all areas of human activities. It creates an open platform for partnership of experts from academia and companies. In this way the institute enables its partners to set up research projects with highly innovative potential.

The staff of the institute has many years of experience from academia. Interes.Institute has built a network of internationally recognized experts and partners in several areas of ICT. For partners, it prepares, manages and personally outsources research projects, which bring real innovations. It offers postgraduate courses and trains professionals in new trends of ICT.

### Slovak University of Technology

The Slovak University of Technology in Bratislava (STU) is a modern research and higher education institution. It continues a legacy of the 250-year-old Mining Academy in Banská Štiavnica, where the foundations of vocational and practical learning were established. STU offers education in technical fields and involves students in research in natural sciences, computer sciences, construction, architecture, materials technologies, chemistry and food technologies.

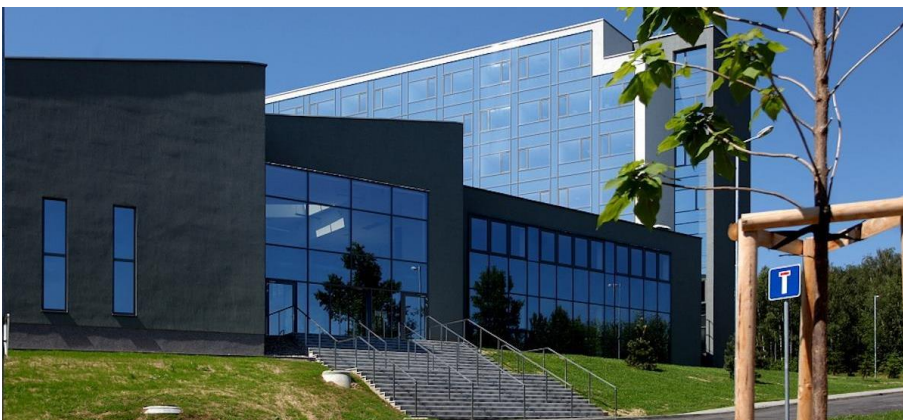
At international level, STU has closed hundreds of collaboration agreements with foreign universities, faculties and research institutes. Every year almost 500 students are sent abroad to study and/or participate in student exchange programmes.

Research teams at the University are involved in international projects and annually deal with about 500 research projects funded through grants and hundreds of research contracts commissioned by businesses. For example, in 2014 teams of STU scientists and engineers worked on 274 projects and almost 500 research projects funded through grants, out of which 20 projects under the European Union's 7th Framework Programme, including the ENIAC initiative.

STU graduates are among the most desirable and the highest paid employees on the Slovakian labour market. Almost 17,000 students attend its 7 faculties and the Institute of Management every year.



The Faculty of Electrical Engineering and Information Technology as one of the oldest technical faculties in Slovakia with rich scientific and research activities has the mission to offer quality academic education on the basis of free scientific research and creative experimental development.



The Faculty of Informatics and Information Technologies covers the very area of informatics and information technologies (IIT) in both research and education. FIIT is the first faculty in the Slovak Republic with such mission.