# Call for Papers and Announcement Petri Nets 2016 37<sup>th</sup> INTERNATIONAL CONFERENCE ON APPLICATIONS AND THEORY OF PETRI NETS AND CONCURRENCY Toruń, Poland, June 19-24, 2016

Additional information about the conference will be published via <u>http://pn2016.mat.umk.pl</u> Contact e-mail: <u>pn2016@mat.umk.pl</u> The conference will be co-located with the 16<sup>th</sup> International Conference on Application of Concurrency to System Design (**ACSD 2016**).

### **Important Dates:**

Abstract submission	January 10, 2016
Submission of Papers:	January 15, 2016
Notification:	March 1, 2016
Final Version Due:	March 15, 2016
Participation in Tool Exhibition:	June 1, 2016
Workshops & Tutorials	June 19-21, 2016
Main Conference:	June 22-24, 2016





The 37<sup>th</sup> annual international Petri Nets conference will be organized by the Department of Formal Languages and Concurrency (Faculty of Mathematics and Computer Science) of Nicolaus Copernicus University, Toruń, Poland. The conference will take place at the Faculty of Mathematics and Computer Science of Nicolaus Copernicus University. 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 defense 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 or submitted to other conferences/journals before or 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: <u>http://www.springer.de/comp/lncs/authors.html</u>.
- adhere to the page limit for the relevant category (see above).
- be sent electronically (as a PDF file) no later than January 10 (or January 15 if, an abstract was submitted by January 10), 2016 using the easychair website.

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 before June 1, 2016. They should include a link to the web pages for the tool (or a short description of the tool). The demonstrators bring their own machines, 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, 2016.

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

- 1. 1980 Strasbourg, France
- 1981 Bad Honnef, Germany
  1982 Varenna, Italy
  1983 Toulouse, France
  1984 Aarhus, Denmark
  1985 Espoo, Finland
  1986 Oxford, UK
  1987 Zaragoza, Spain
  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
  1997 Toulouse, France
  1998 Lisbon, Portugal
  20. 1999 Williamsburg, USA
  2000 Aarhus, Denmark
  2001 Newcastle upon Tyne, UK
  2002 Adelaide, Australia
  24. 2003 Eindhoven, The Netherlands
- 2004 Bologna, Italy
  2005 Miami, USA
  2006 Turku, Finland
  2007 Siedlce, Poland
  2008 Xi'an, China
  2009 Paris, France
  2010 Braga, Portugal
  2011 Newcastle upon Tyne, UK
  2012 Hamburg, Germany
  2013 Milano, Italy
  2014 Tunis, Tunisia
  2015 Brussels, Belgium

## Organization

#### **Program Committee Co-chairs**

Fabrice Kordon LIP6. Université P. & M. Curie Fabrice.Kordon@lip6.fr

### Daniel Moldt Department of Informatics, Universität Hamburg Moldt@informatik.uni-hamburg.de

# **Tools Exhibition Chair**

Marcin Piątkowski Faculty of Math. and Computer Science, Nicolaus Copernicus University ⊠pn2016-tools@mat.umk.pl

### **Program Committee**

W.van der Aalst, The Netherlands G. Balbo, Italy K. Barkaoui, France R. Bergenthum, Germany L. Bernardinello, Italy H. Boucheneb, Canada D. Buchs, Switzerland L. Cabac, Germany P. Chrząstowski-Wachtel, Poland J.M. Colom, Spain R. Devillers, Belgium D. de Frutos Escrig, Spain J.M. Fernandes, Portugal H. Hansen, Finland M. Heiner, Germany V. Janousek, Czech Republic J.P. Katoen, Germany

### Workshop and Tutorial Co-chairs

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University of Leiden

LIACS,

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### **Publicity Chair**

Kamila Barylska Faculty of Math. and Computer Science, Nicolaus Copernicus University ⊠pn2016-publicity@mat.umk.pl

V. Khomenko, UK E. Kindler, Denmark F. Kordon, France (co-chair) L. Kristensen, Norway H. Matsuno, Japan Ł. Mikulski, Poland A. Miner, USA D. Moldt, Germany (co-chair) M. Mukund, India P. Poizat, France A. Polyvyanyy, Australia R. Robbana, Tunisia S. Schwoon, France N. Sidorova, The Netherlandts P. Sobocinski, UK Y. Thierry-Mieg, France A. Valmari, Finland

# Łukasz Mikulski

**Organizing Committee Chair** 

Faculty of Math. and Computer Science, Nicolaus Copernicus University ⊠pn2016@mat.umk.pl

### **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

## 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 (e-mail:robert.lorenz@informatik.uni-augsburg.de). Further information as well as subscribtions 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/lncs/topnoc) 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 (e-mail: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:

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

# Toruń



Toruń, one of the oldest cities in Poland, is located on the Vistula river in the northern part of the country, and is best known as the birthplace of the astronomer **Nicolaus Copernicus**. In 1997 the medieval part of the city was designated a **UNESCO World Heritage Site**, and in 2007 the Old Town in Toruń was designated as one of the **Seven Wonders of Poland**.



National Geographic rated the old town market and the Gothic town hall as one of the **30 Most Beautiful Places in the World**. Toruń has many monuments of architecture beginning from the Middle Ages. Most of them have an almost intact medieval spatial layout.

Toruń has the largest number of preserved Gothic houses in Poland, many with original wall paintings or wood-beam ceilings from the 16th to the 18th century. Among the most important monuments are: the Cathedral John the Evangelist and John the Baptist (14th century), St. Mary Church (14th century), the Old Town Hall (12th-16th century) - one of the most monumental town halls in Central Europe, ruins of the city fortifications (12th-15th century), and the 15th-century Gothic house (now a museum) where Nicolaus Copernicus was born.



Toruń escaped substantial destruction over the centuries. Particularly left intact was the Old Town, all of whose important architectural monuments are original rather than reconstructed. In recent years major renovation projects have been undertaken to improve the condition and external presentation of the Old Town. Numerous buildings as well as the city walls are illuminated at night, creating a unique effect among Polish cities.

## **Nicolaus Copernicus University**

The Nicolaus Copernicus University in Toruń (NCU) is one of the largest universities in Poland, currently comprising 17 faculties. It provides graduate and postgraduate courses for almost 30 000 students, offering education in over 80 fields of study, 100 specializations and 50 postgraduate courses. The university employs 4300 staff. The Nicolaus



Copernicus University is rated as one of the five best universities in Poland, while QS World University Ranking has placed NCU in the top 4% of universities in the world.

## **Faculty of Mathematics and Computer Science**

The Faculty of Mathematics and Computer Science was founded in 1993, but, mathematical sciences were developed in Nicolaus Copernicus University in Toruń from the very beginning of its existence, first, within departments, later, in the Institute of Mathematics – a part of the Faculty of Mathematics, Physics and Chemistry. In the 1960s a new specialization, a 'numerical division', was established. It can be regarded as the beginning of the computer science studies in Toruń.

The Faculty of Mathematics and Computer Science, with its high level of scientific research and a number of world-class researchers, has always been awarded the highest grade in Polish evaluation of scientific units.



Well-equipped laboratories, lecture halls, seminar rooms and the library providing access to the large collection of resources, together with the latest technologies and free wireless Internet access in the halls, form a modern infrastructure.

The building of the Faculty is within a 5 minute walking distance from the Old Town, which offers a wide range of restaurants and affordable hotels.

