Universität Hamburg
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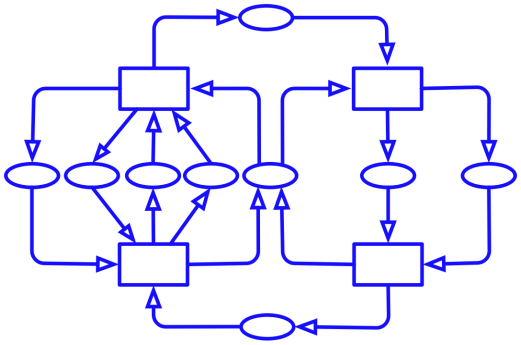
HITeC

33rd International Conference on Application and Theory of Petri Nets and Concurrency

and

12th International Conference on Application of Concurrency to System Design



June 25-29, 2012
Hamburg, Germany

Conference and Workshop Programme

Contents

1 Preface

Moin Moin and welcome to Hamburg!

We are happy to present you this programme booklet of the **33rd International Conference on Application and Theory of Petri Nets and Concurrency** (Petri Nets 2012) and the **12th International Conference on Application of Concurrency to System Design** (ACSD 2012) and its satellite events.

The events will start on Sunday, June 24th, with the Petri Net Course, which will run for three days. On Monday, June 25th, the workshops *Petri Nets and Software Engineering* (PNSE 2012), *Logics, Agents, and Mobility* (LAM 2012) and *Biological Processes and Petri Nets* (BioPPN 2012) will take place at the Informatics campus of the University of Hamburg. On Tuesday, June 26th, the workshops *Petri Net Compositions* (CompoNet 2012) and *Petri Net-based Security* (WooPS 2012) will take place. PNSE 2012 will be continued on Tuesday as well. Furthermore the Model Checking Contest (MCC) and the two Petri Net Course related tutorials will be held on Tuesday.

From Wednesday, June 27th, to Friday, June 29th, the main conferences will take place at the main campus of the University of Hamburg. On those days the conference reception (Wednesday) and conference dinner (Thursday) will be held in selected locations in Hamburg.

This programme booklet contains all the information you need during the conferences and satellite events. Maps and directions to the different locations and events are provided as well as detailed schedules of talks and sessions. Information about the invited talks by Sir C. A. R. (Tony) Hoare, Alain Finkel, Bart Jacobs, Joost-Pieter Katoen and Jens Sparsø is also provided.

If you have any questions regarding the conferences, workshops or Hamburg in general feel free to ask any of our student volunteers or senior staff members present at the conference. We will be happy to answer any questions and provide the information you require. The whole crew put a lot of effort into organising this event and we hope that you will enjoy the conferences and your stay in Hamburg in general.

Explicitly I want to thank all members from the TGI-group. Without their help the preparations would not have been possible.

Daniel Moldt
(General and Organizing Chair)

2 General Information

2.1 Arrival

The exact locations of the lecture rooms and registration desks will be indicated at the conference site. Our crew will be wearing red shirts with the conference logo on the back. If you have any questions feel free to ask any of the crew or organisers.

On Sunday (Course Participants) On Sunday, June 24th, the Petri Net Course will start at 9.30 a.m. On Sundays the public transportation in Hamburg is running on a slightly cut back schedule. Trains and buses run less frequently (i.e. every 10 or 20 minutes). We recommend using the subway line **U2** to "Hagenbecks Tierpark" and then taking bus line **281** or **181** to the stop "Informatikum". Another option is the bus-line **4** using the stop "Wördemanns Weg" or "Volksparkstraße". From there the Informatics Campus is a ten minute walk away. You can also use the personalised schedule option at `www.hvv.de/en` to find a suitable bus/train connection from your location.

2.2 On-Site Registration

Upon first arrival we would like to ask you to check-in at our registration desk. Here you will receive the conference bag containing proceedings, course material and further information. The registration desk is also the main contact point for any questions regarding invoices and payment of fees. It is open from around 8 a.m. to 6 p.m. during the entire event and our crew members are happy to help you in any way they can.

If you should arrive late (e.g. during the conference opening or an invited talk) there is no problem to visit the lecture rooms first and check in during a break. In this case follow the signs or ask one of our staff.

Workshops/Course The registration desk at the workshop location (Informatics Campus) is open from Sunday to Tuesday. It is located in the foyer of building **D** (see map on page 10).

Conference The registration desk at the conference location (main campus near "Dammtor") is open from Wednesday to Friday. It is located in the foyer of building **ESA W** (see map on page 8).

2.3 Internet and PC Access

A wireless internet connection is available to all participants during the entire event. You will receive a username and password with your conference bag. Please use the

wireless network *guest*. You can find a more detailed manual in your conference bag along with your username and password.

If you possess an EDU-Roam account you can use your regular account and configuration with the wireless network *eduroam*.

We also provide a number of notebooks for your use near the registration desk. Using these you can access the internet, if you do not bring your own notebook.

3 Locations

The conference and workshops take place in the rooms of the University of Hamburg. Workshops take place at the Informatics campus in Hamburg-Stellingen district. The conference itself takes place at the main campus. Please see the maps for more detailed information.

For more detailed information about public transportation in Hamburg, please visit `www.hvv.de/en`. There you can find personalised schedules, departure and arrival times of all lines, etc.

3.1 Conference Location

From Wednesday to Friday the conference will take place in the imposing main building of the university, located at the "Edmund-Siemers-Allee" (hence the abbrevation ESA). The **Registration Desk** is erect in the west wing; events take place in the lecture halls A, B, C and M in the ESA main building, and rooms ESA-O 221 and ESA-W 221 in the wings. Nearby are the bus stations "Staatsbibliothek" and "Dammtor" where lines **4** and **5** operate and the train stations "Dammtor" (lines **S21** / **S31**) and "Stephansplatz" (line **U1**). Coming from the conference hotel you can reach the building by walking up the "Edmund-Siemers-Allee". For detailed information please find a campus map below.

3.2 Workshop & Course Location

From Sunday to Tuesday the workshops, tutorials, the Petri net course and the model checking competition take place in the northern outskirts of Hamburg, in the Stellingen district. You can reach the Informatics Campus with the bus lines **181** and **281** leaving at the station "Informatikum". Both lines connect to the commuter train line **U2** in "Hagenbecks Tierpark". Coming from the Conference Hotel, *Baseler Hof*, please take a bus from line **5** to "Siemersplatz" and then change across the road for a **281** to the "Informatikum" stop. The *Registration Desk* is located in House D. Please find a detailed map of the informatics campus below.

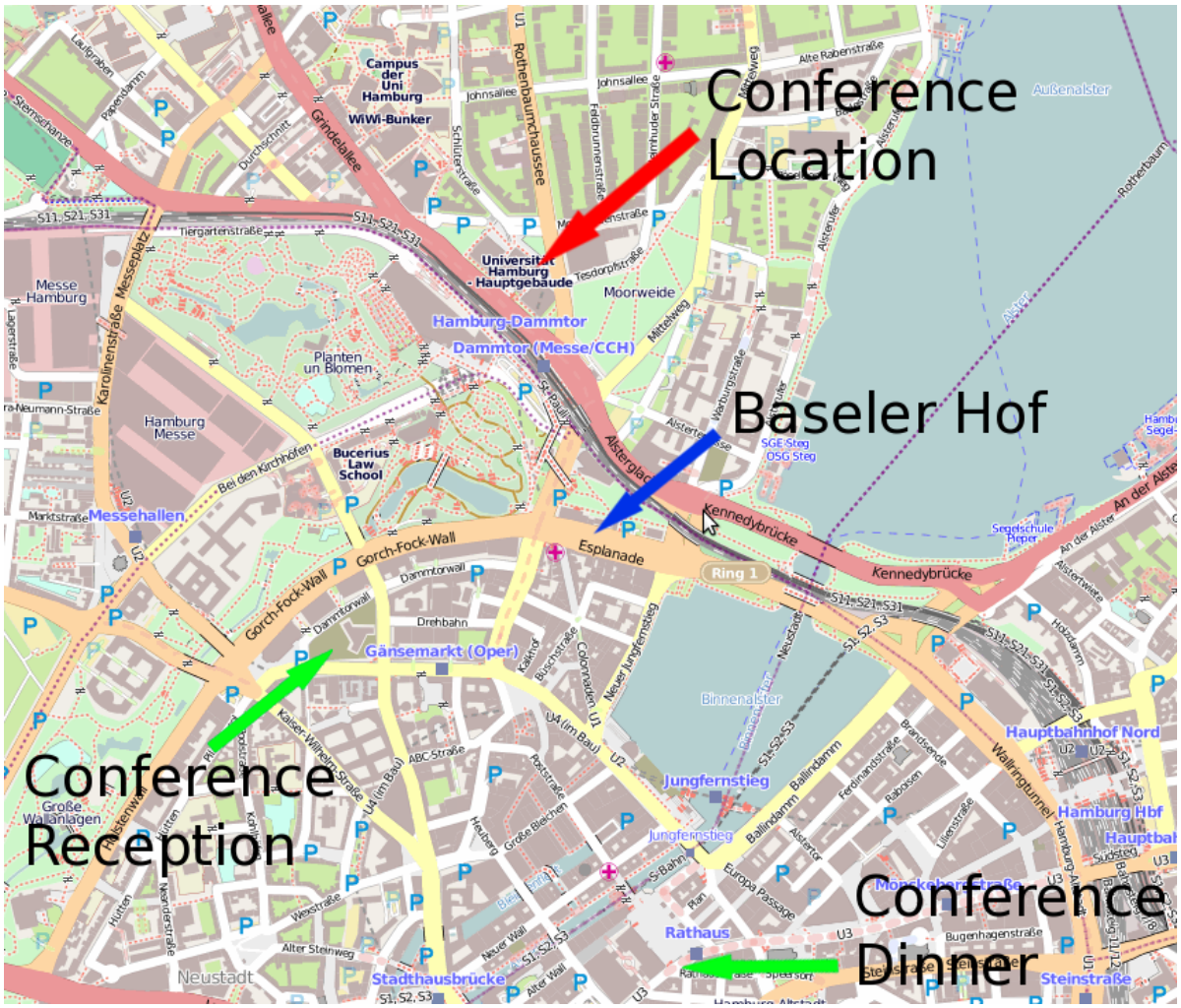


Figure 3.1: Overview of Hamburg city centre. Main campus of the University of Hamburg (red arrow), conference hotel *Baseler Hof* (blue arrow) and location of conference reception and conference dinner (green arrows).

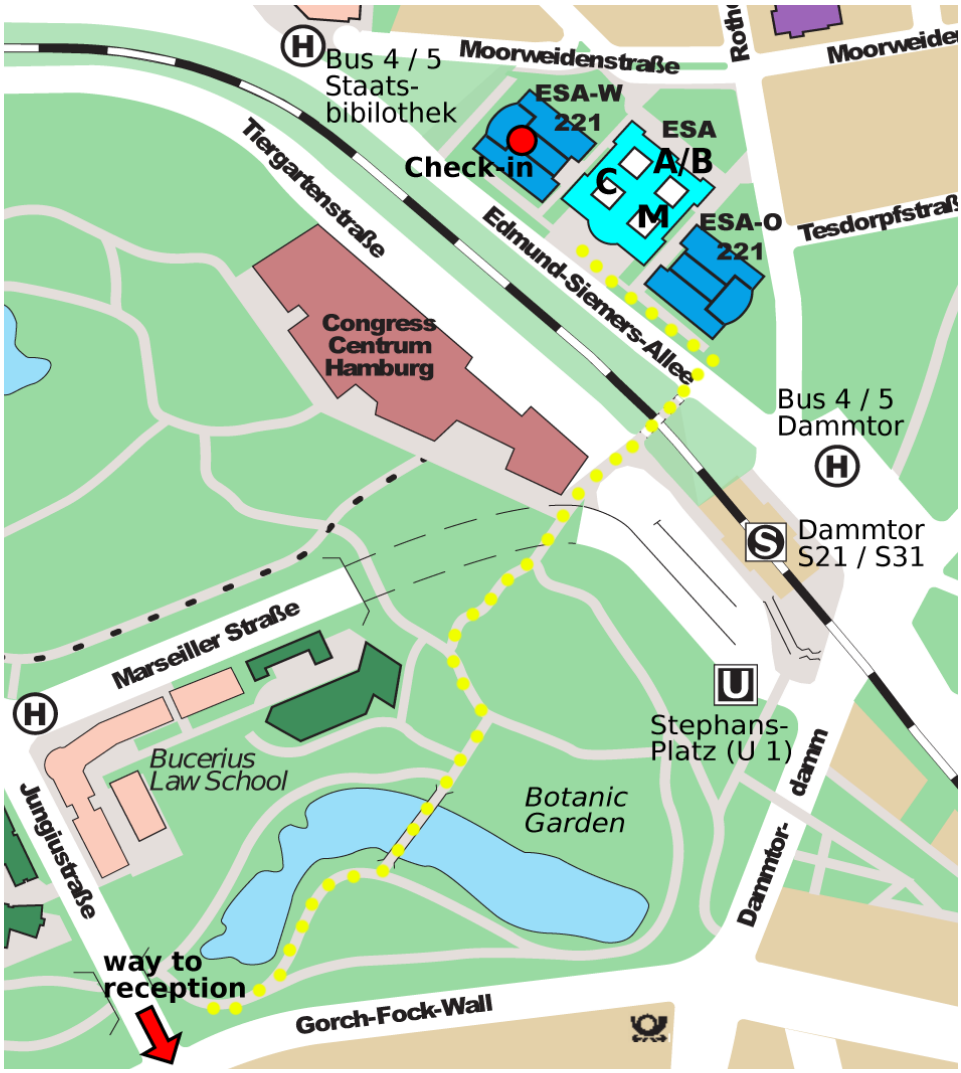


Figure 3.2: Detailed view of the main conference location, the ESA building with the east (ESA-O) and west (ESA-W) wings (coloured blue in the map). The dotted path through the park leads to the conference reception.

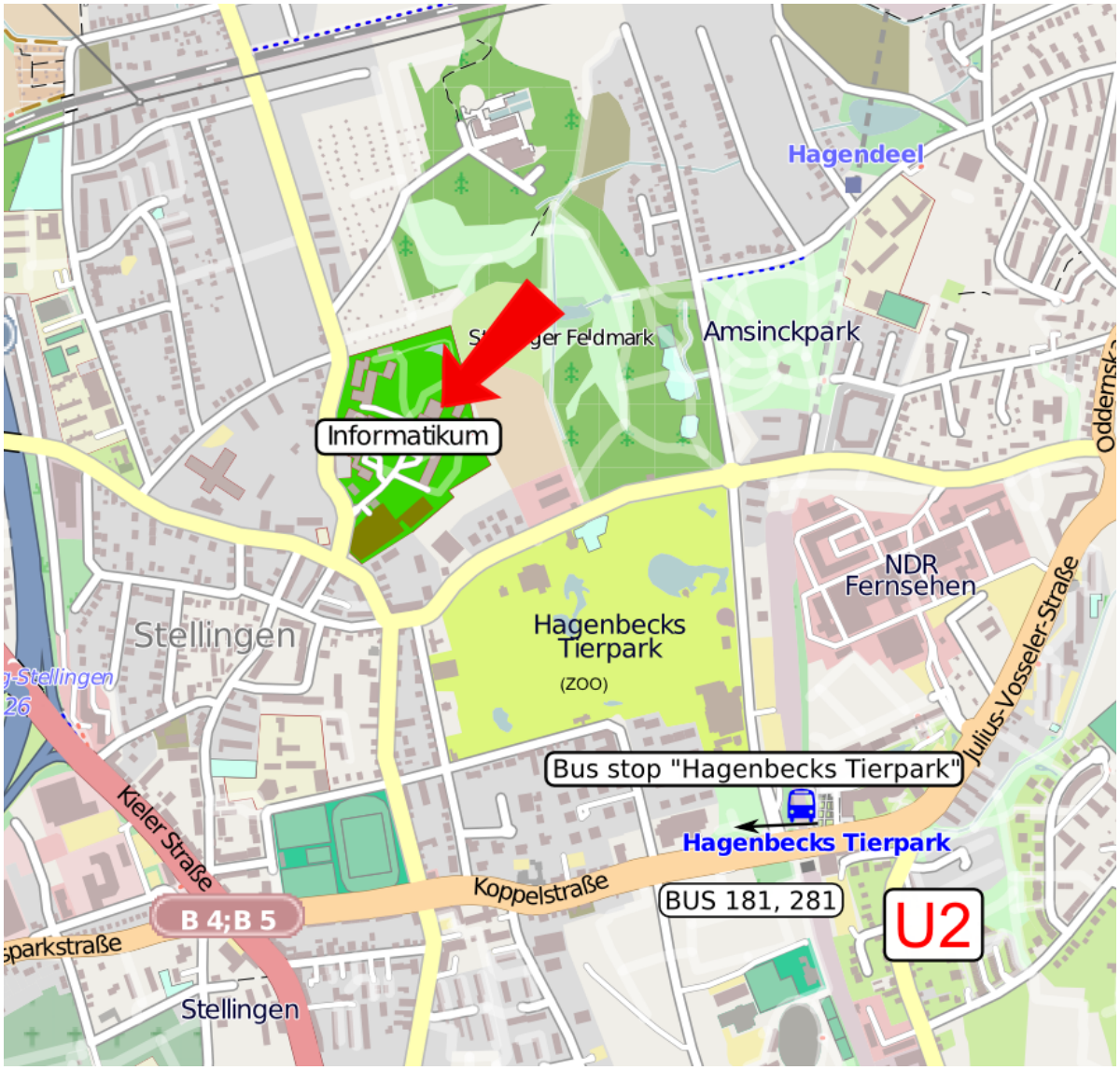


Figure 3.3: Overview of Hamburg-Stellingen. The workshop location is the Informatics campus (red arrow).

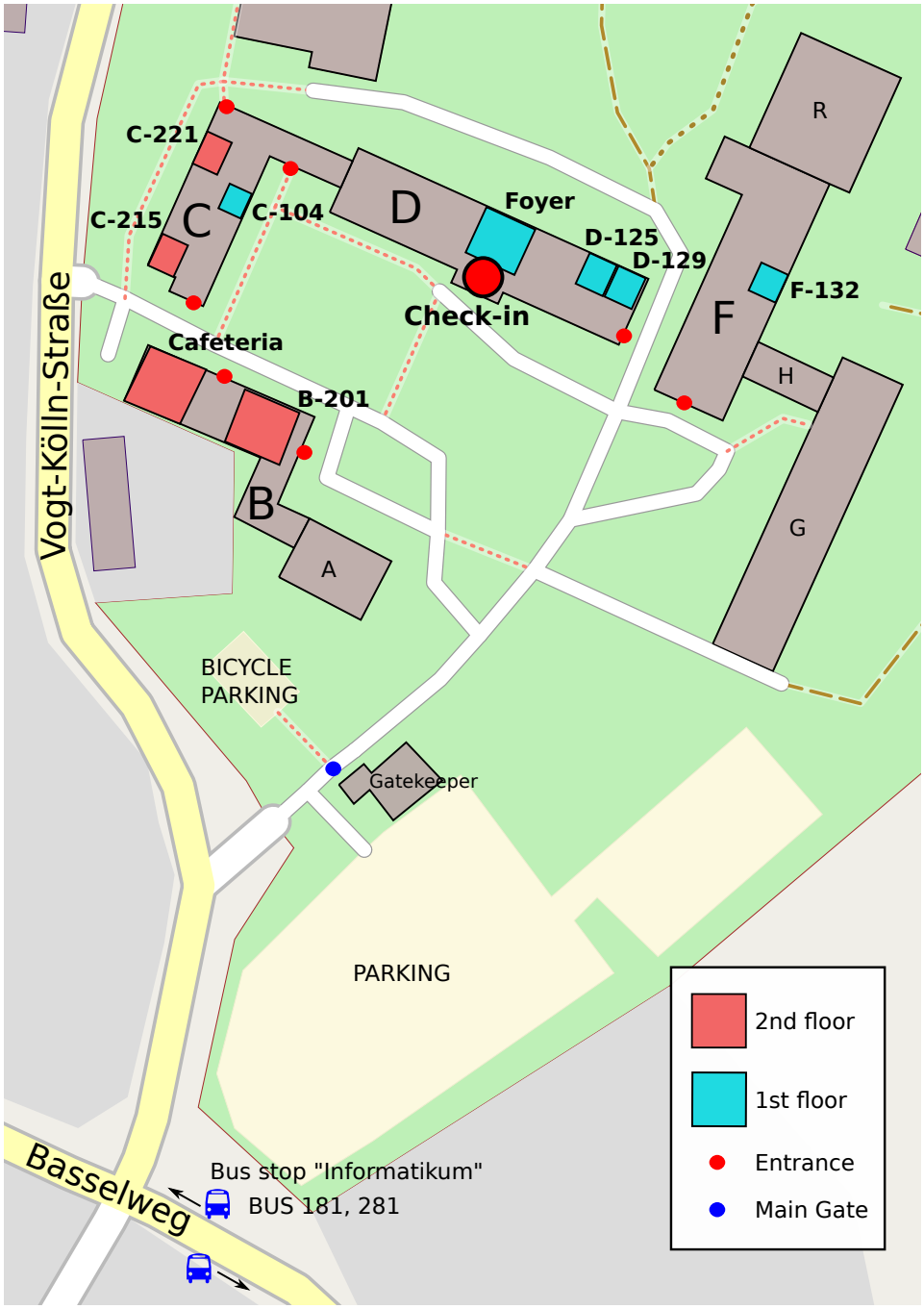
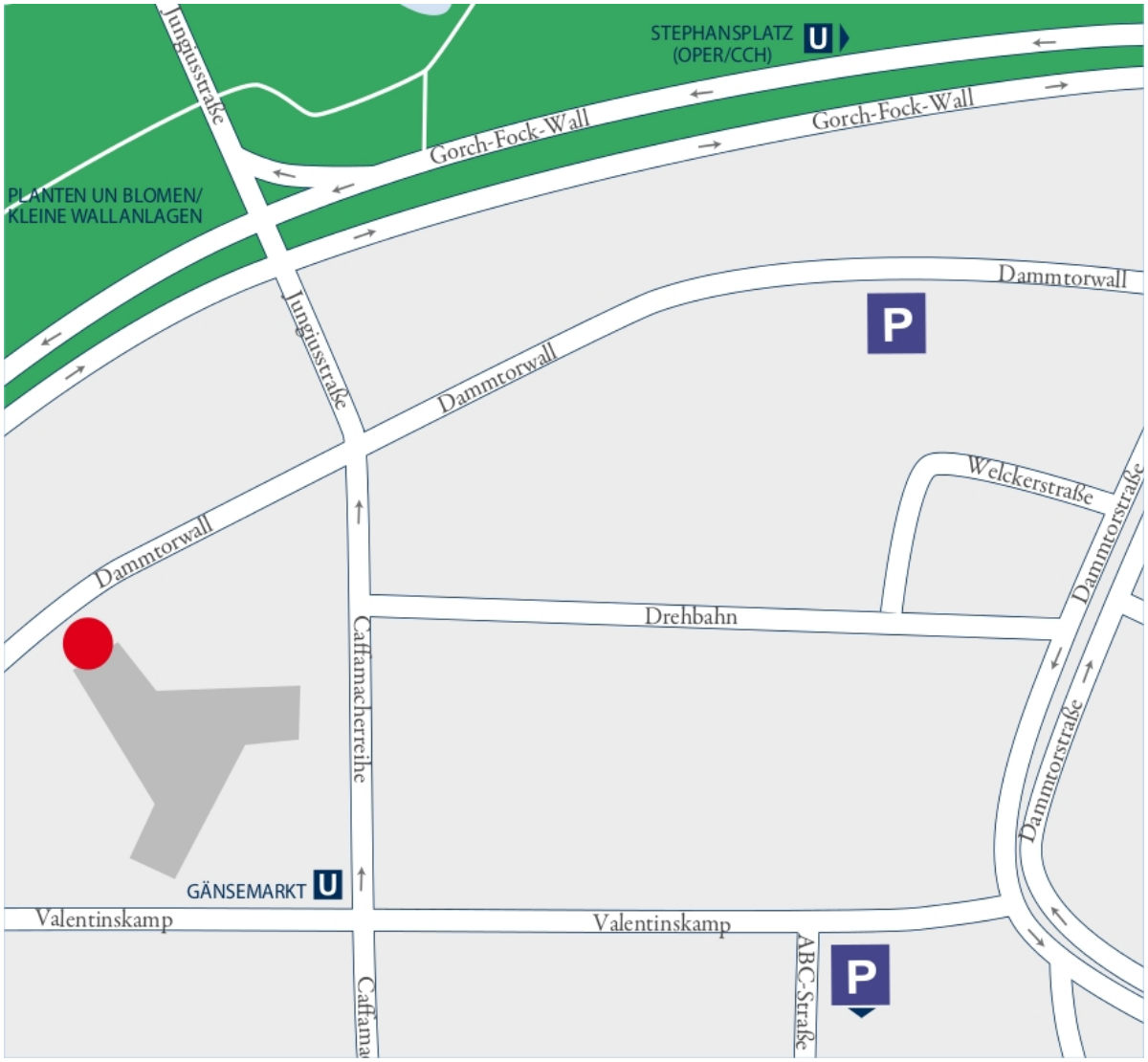


Figure 3.4: The reception and information desk is in the foyer of house D. Invited talks will be given in the lecture hall in house B. The other events take place in houses C, D and F.

4 Social Programme

4.1 Conference Reception

The conference reception takes place in *Nord Event Panoramadeck*, which is located in "Dammtorwall 15". This is the hotel *Emporio's* 23rd floor with a wonderful panorama of Hamburg. The location is near to the commuter train station "Gänsemarkt" (line **U2**) as well as "Stephansplatz" (line **U1**). Please have a look at the map for more detailed information.



© by Nord Event

When the conference ends on Wednesday at 6 p.m., the participants are invited to come together at “Planten un Blomen” near the Dammtor station. From there we want to take a walk through “Planten un Blomen”. This is a very old botanic garden, hosting the biggest japanese garden in Europe.

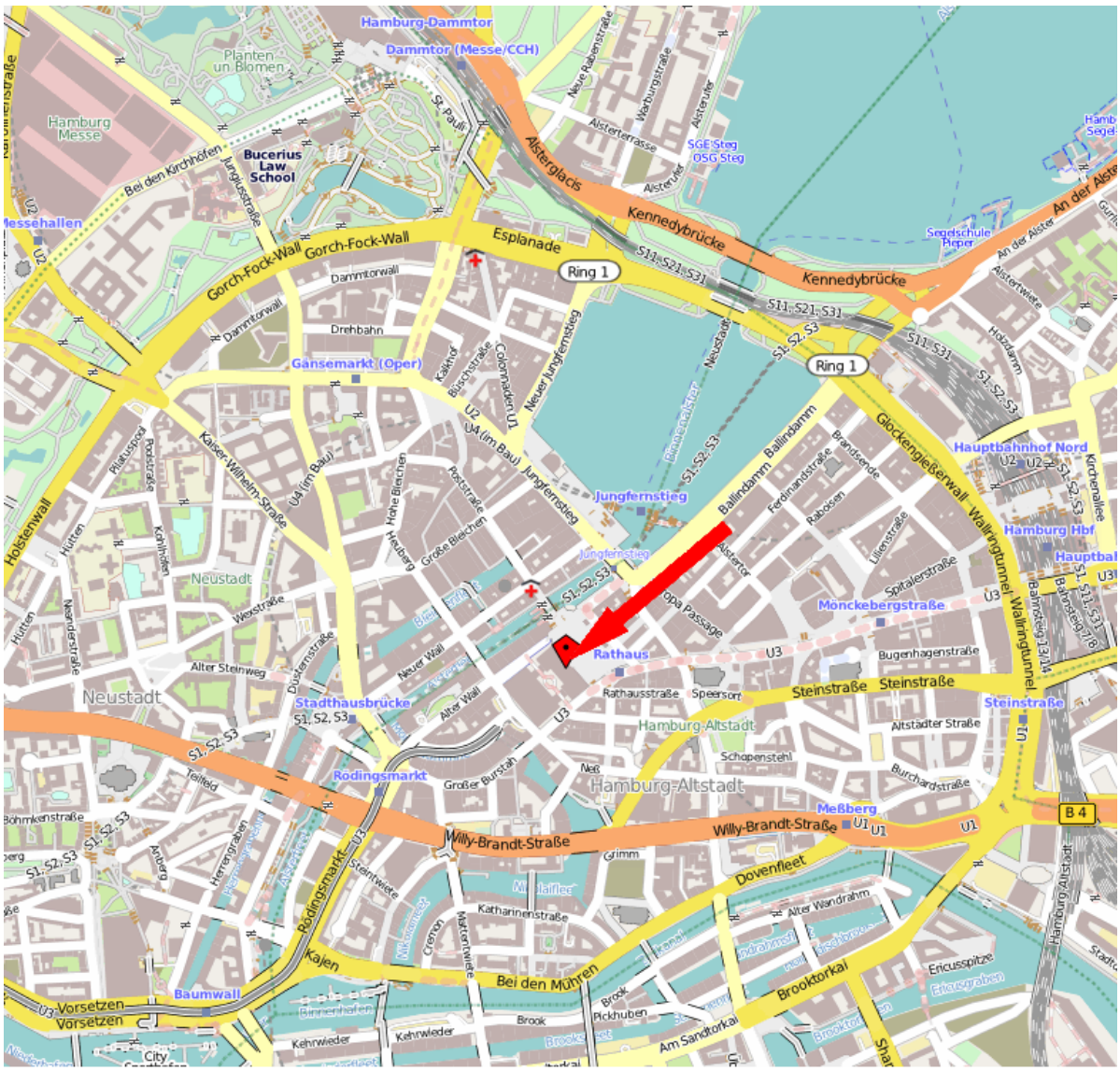
© by Arnd Hemken.

The reception starts at 7 p.m. and ends at 8:30 p.m., which is still in time to watch the semi-final of the EURO2012 football cup for those interested.

4.2 Conference Dinner

The Conference Dinner takes place on Thursday, June 28th, at 8:00 p.m. in the *Parlament Hamburg*. The restaurant is located in the city hall, which can be reached via "Rathausmarkt" stop.
You can reach "Rathausmarkt" via many buslines, especially the lines **4**, **5** and **109**. Coming from the conference hotel or the main conference location please take lines **4** or **5** from "Dammtor" to "Rathausmarkt". Coming from the Informatics campus you can either take the **281** to "Hagenbecks Tierpark" and then take the commuter train line **U2** to "Jungfernstieg". "Jungfernstieg" is only a short walk to the city hall. Or you take the **281** to "Siemersplatz" where you can change to line **5**.

© by Parlament-Hamburg

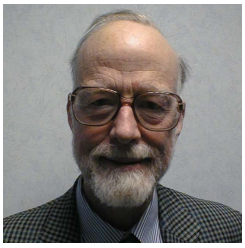


Restaurant Parlament-Hamburg

5 Keynotes

Sir C. A. R. (Tony) Hoare

A Net-based Model for the Algebra of Concurrent Programming



Time: *Thursday, 9:00* **Room:** *ESA-A*

Bio: Sir C. A. R. Hoare, commonly called Tony Hoare, studied philosophy and machine translation of languages at Oxford University and Moscow State University until 1959. After eight years as programmer, Chief Engineer, and Chief Scientist at Elliott Brothers, he obtained professorship for Computing Science at the Queen's University in Belfast, and joined the Programming Research Group at Oxford University in 1977. On reaching retirement age at Oxford, he went back to industry as a senior researcher with Microsoft Research in Cambridge. Tony Hoare is well known for his contributions to Computer Science. Among other results, he discovered the Quicksort algorithm, implemented the first commercial ALGOL 60 compiler, hosted the Z specification language design, and designed the CSP programming model.

Abstract: The operators of concurrent programming include sequential composition, choice, synchrony, and concurrent composition. These operators are subject to algebraic laws as familiar and elegant as the laws governing the arithmetic operators which we learnt at school. The only unfamiliar law is that which relates sequential and concurrent composition: it is similar to the interchange law of category theory. The power of the algebra of concurrent programming is such as to permit purely algebraic proof of familiar programming calculi, like Hoare logic and separation logic and Jones rely/guarantee. Furthermore, the algebra can also prove the transitions of an operational semantics, like Milner's process calculus CCS.

But do the laws apply to specifications and designs of programs that run concurrently on today's multi-processor computer systems? To give an affirmative answer to this question, we define a realistic mathematical model of concurrent programming, and prove that it satisfies the laws. A program is modelled as the set of all its possible executions, in all possible environments. Choice is modelled as union of sets (only one operand is executed). Synchrony is intersection (both operands are executed, and behave the same), and refinement between programs is set inclusion (so the refined program is more deterministic).

An execution is modelled as an occurrence net, whose nodes are events that have occurred in and around the executing computer, and whose arrows represent a dependency between pairs of the events. Concurrent composition of executions is just their disjoint

union: every event is evoked by exactly one of the concurrent operands. Sequential composition is similar, subject to the proviso that no event of the first operand can depend on any event of the second operand. These composition operators are lifted point-wise to sets.

Alain Finkel

The Theory of WSTS: The Case of Complete WSTS

Time: *Friday, 9:00* **Room:** *ESA-C*

Bio: Alain Finkel is professor at the Ecole Normale Supérieure de Cachan (ENS Cachan). He is the creator of the theory of well-structured transition systems (PhD 1986 - ICALP '1987) and during the same years, he defined and studied (front) lossy channel systems, these two research topics being still quite active since 25 years. His current research interests still include the theory of well-structured transition systems and the verification of various other infinite-state systems. He wrote around 100 research papers: in particular, he participated at the LSV book "Systems and Software Verification. Model-Checking Techniques and Tools" which was, in 2001, the first undergraduate introduction to model-checking. He founded the computer science laboratory (LIFAC) at the ENS Cachan and then he co-founded the LSV computer science laboratory. He was co-chairman for the major Conferences STACS and CAV. Since few years, he decided to teach applied cognitive sciences for training to pedagogy PhD students of the ENS Cachan and professors in the Universities. He sometimes writes research papers in cognitive domains like mental imagery or cognitive automata.

Abstract: Well-structured transition systems (WSTS) are a general class of infinite-state systems where termination, boundedness and coverability are decidable, using simple algorithms that work forwards and backwards. These algorithms cannot decide more complex problems like the place-boundedness problem and the computation of the cover (the downward closer of the reachability set).
To achieve this goal, we consider complete WSTS where the set of states is a complete well ordering (with other technical but realistic hypotheses).
We will then describe a simple, conceptual forward analysis procedure for infinite-complete WSTS. This computes the so-called clover of a state. When S is the completion of a WSTS X, the clover in S is a finite description of the downward closure of the reachability set of X. We show that our procedure terminates in more cases than the generalized Karp-Miller procedure on extensions of Petri nets.
We will first provide a survey about the theory of WSTS and then we will focus on complete WSTS.

Bart Jacobs

Topics in Computer Security

Time: *Wednesday, 15:00* **Room:** *ESA-C*

Bio: Prof. Dr. Bart Jacobs (1963) studied mathematics and philosophy at Nijmegen. He got his PhD in 1991, also at Nijmegen, in the area of theoretical computer science. He worked at universities of Cambridge (UK) and Utrecht, and at the Centre for Mathematics and Computer Science in Amsterdam. In 1996 Jacobs returned to Nijmegen on a research position of the Royal Netherlands Academy of Sciences (KNAW). Since 2002 he is full professor in the area of security and correctness of software. His work was supported by a prestigious Pionier grant of the Netherlands science foundation NWO. With his research group he has worked over the last decade on a number of societally relevant security topics such as chipcards (eg. in passports and transport), electronic voting, smart metering, road pricing and privacy. During 2005-2011 Jacobs was also parttime professor at the Technical University Eindhoven. In 2007 he served as a member of the "Korthals Altes" committe that advised on the future of the voting process in the Netherlands. In 2008 his research group attracted worldwide attention by showing severe security vulnerabilities in the Mifare Classic, the most widely used smart card. He is a member of the newly formed National Cyber Security Council that provides cabinet level advice in the Netherlands on strategic computer security matters.

Abstract: Typical of the area of computer security is the presence of a malicious attacker who is deliberately trying to undermine your system. This makes computer very hard, because the behaviour of the attacker is hard to predict. Formal approaches to security thus mainly serve to make your assumptions about your system and the attacker explicit. Via a number of case studies in computer security this point will be elaborated.

Joost-Pieter Katoen

GSPNs Revisited: Simple Semantics and New Analysis Algorithms

Time: *Wednesday, 9:00* **Room:** *ESA-B*

Bio: Joost-Pieter Katoen leads the Software Modeling and Verification Group at RWTH Aachen University and is part-time associated to the University of Twente. His research interests include model checking, concurrency theory, formal semantics and probabilistic models. He is member of the steering committee of QEST, FORMATS, TACAS, and ETAPS (deputy chair), senior member

of the ACM, and member of the IFIP WGs 1.8 and 2.2. With
Christel Baier (TU Dresden), he published a comprehensive monograph on "Principles of Model Checking" (MIT Press).

Abstract: This talk considers interactive Markov chains (IMCs), a natural generalization of transition systems and continuous-time Markov chains (CTMCs). We show how they can be used to provide a truly simple semantics of Generalized Stochastic Petri Nets (GSPNs). In fact, any GSPN. No restrictions on the concurrent/conflicting enabledness of immediate transitions are imposed. This contrasts with classical solutions for GSPNs which use weights. (A simple extension of IMCs also covers weights.)
We will present novel analysis algorithms for expected time and long-run average time objectives of IMCs, i.e., GSPNs. Two case studies indicate the feasibility of these analyses and show that a classical reliability analysis for confused GSPNs may lead to significant over-estimations of the true probabilities.
My key slogan will be: treat nondeterminism as is! This yields both a simple GSPN semantics and trustworthy analysis results.
Finally we show that IMCs naturally cover engineering notations like dynamic fault trees and the SAE-standardized Architecture Analysis & Design Language (AADL).

Jens Sparsø

Networks-on-chip for real-time multi-processor systems-on-chip

Time: *Thursday, 15:00* **Room:** *ESA-B*

Bio: Jens Sparsøis professor at the Department of Informatics and Mathematical Modelling at the Technical University of Denmark (DTU). His research interests are in the field of computer engineering and include: application specific computing structures, low power design techniques, asynchronous circuits and systems, multi-processor systems-on-chip, and networks-on-chip. He is the co-author of the book "Principles of Asynchronous Circuit Design – A Systems Perspective" (Kluwer, 2001) – a widely used textbook in the field – and he has given a number of tutorials and invited talks on asynchronous design in academia and industry. He has been on the steering committees and technical program committees for several conferences, including the ASYNC and NOCS symposia, and in 2012 he is general chair and hosting the two events at DTU.

Abstract: Over the last decade, the network-on-chip concept has evolved from an academic research topic towards industrial take-up. Many of today's chip multi-processors (used in general purpose computing) and many of today's multi-processor system-on-chip platforms (used in application-specific embedded systems) are built around some

form of intra-chip packet-switched interconnection-network. Designing a network-on-chip poses challenges in several very different areas: At the hardware level designers are concerned with issues like area, speed and power consumption of the routers and links in the network, as well as timing organization of the whole platform (synchronous, mesochronous, globally-asynchronous, locally-synchronous and asynchronous). At the system level designers are concerned with issues like programming model, memory hierarchy and perhaps guaranteeing of real-time requirements. The talk will review some of our past work in the field of networks-on-chip and the lessons learned, and discuss ongoing research specifically targeting networks-on-chip for real-time multi-processor systems.

6 Schedule

Wednesday, June 27th

08:00 - Registration Opened
08:30 - Opening Session - Room: ESA B
09:00 - Invited Talk: Joost-Pieter Katoen - GSPNs Revisited: Simple Semantics and New Analysis Algorithms - Room: ESA B
10:00 - Break

10:30 - Session 1

Petri Nets Talks (Stochastic Nets) - Room ESA C:

Thomas Mailund, Anders Halager and Michael Westergaard - *Using Colored Petri Nets to Construct Coalescent Hidden Markov Models: Automatic Translation from Demographic Specifications to Efficient Inference Methods*

Simon Spinner, Samuel Kounev and Philipp Meier - *Stochastic Modeling and Analysis using QPME: Queueing Petri Net Modeling Environment v2.0*

Monika Heiner, Mostafa Herajy, Fei Liu, Christian Rohr and Martin Schwarick - *Snoopy – a unifying Petri net tool*

ACSD Talks - Room ESA W-221

Tim Strazny and Roland Meyer - *An Algorithmic Framework for Coverability in Well-Structured Systems*

Łukasz Mikulski and Maciej Koutny - *Hasse Diagrams of Combined Traces*

Andrey Mokhov, Victor Khomenko, Arseniy Alekseyev and Alex Yakovlev - *Algebra of Parametrised Graphs*

12:00 - Lunch Break

13:45 - Session 2

Petri Nets Talks (Process Mining) - Room ESA C

Marc Solé and Josep Carmona - *SMT-based Discovery Algorithm for C-nets*

Wil van der Aalst - *Decomposing Process Mining Problems Using Passages*

ACSD Talks - Room ESA W-221

Javier Esparza and Christian Kern - *Reactive and Proactive Diagnosis of Distributed Systems using Net Unfoldings*

Sven Linker - *Translating Structural Process Properties to Petri Net Markings*

14:45 - Break
15:00 - Invited Talk: Bart Jacobs - Topics in Computer Security - Room ESA C
16:00 - Break

16:30 - Session 3:

Petri Nets Talks (Workflow Nets) - Room ESA O-221:

Guanjun Liu, Jun Sun, Yang Liu and Jinsong Dong - *Complexity of the Soundness Problem of Bounded Workflow Nets*

Maria Martos-Salgado and Fernando Rosa-Velardo - *Cost Soundness for Priced Resource-Constrained Workflow nets*

Eric Badouel - *On the alpha-Reconstructibility of Workflow Nets*

ACSD Talks - Room ESA W-221:

Andrey Mokhov, Victor Khomenko, Danil Sokolov and Alex Yakovlev - *On Dual-Rail Control Logic for Enhanced Circuit Robustness*

Andrew Mundy, Terrence Mak, Alex Yakovlev, Simon Davidson and Steve Furber - *Large-Scale On-Chip Dynamic Programming Network Inferences using Moderated Inter-Core Communication*

Jakob Lechner, Martin Lampacher and Thomas Polzer - *A Robust Asynchronous Interfacing Scheme with Four-Phase Dual-Rail Coding*

18:00 - End of Talks

Thursday, June 28th

09:00 - Distinguished Carl Adam Petri Lecture (Room ESA A):
Sir C. A. R. (Tony) Hoare - *Net Models for Concurrent Object Behaviour*
10:00 - Break

10:30 - Session 4:

Petri Nets Talks (Semantics) - Room ESA M:

Matthias Weidlich and Jan Martijn van der Werf - *On Profiles and Footprints - Relational Semantics for Petri Nets*

Dirk Fahland and Robert Prüfer - *Data and Abstraction for Scenario-Based Modeling with Petri Nets*

Xu Wang - *Maximal Confluent Processes*

ACSD Talks - Room ESA W-221:

Antti Valmari - *All Linear-Time Congruences for Finite LTSs and Familiar Operators*

Martin Bezděka, Ondřej Bouda, Ľuboš Korenčiak, Matúš Madzin and Vojtěch Řehák - *Sequence Chart Studio*

Ricardo J. Rodriguez, Jorge Julvez and José Meseguer - *PeabraiN: A PIPE Extension for Performance Estimation and Resource Optimisation*

12:00 - Lunch Break

13:30 - Tool Demo (Joint Session) - Room ESA W-221
14:45 - Break
15:00 - Invited Talk - Room ESA B:
Jens Sparsø- *Networks-on-chip for real-time multi-processor systems-on-chip*
16:00 - Break

16:30 - Session 5:

Petri Nets Talks (Verification) - Room ESA M:

Antti Valmari and Henri Hansen - *Old and New Algorithms for Minimal Coverability sets*

Andreas Lehmann, Niels Lohmann and Karsten Wolf - *Stubborn Sets for Simple Linear Time Properties*

Sami Evangelista and Lars Kristensen - *Hybrid LTL Model Checking with the Sweep-Line Method*

Astrid Rakow - *Safety Slicing Petri Nets*

ACSD Talks - Room ESA W-221:

Olli Saarikivi, Kari Kähkönen and Keijo Heljanko - *Improving Dynamic Partial Order Reductions for Concolic Testing*

Antti Siirtola, Antti Puhakka and Gerald Lüttgen - *Introducing Fairness into Compositional Verification via Unidirectional Counters*

Adnan Bouakaz, Jean-Pierre Talpin and Jan Vitek - *Affine Data-Flow Graphs for the Synthesis of Hard Real-Time Applications*

18:30 - End of Talks

Friday, June 29th

09:00 - Invited Talk - Room ESA C:
Alain Finkel - The Theory of WSTS: The Case of Complete WSTS
10:00 - Break

10:30 - Session 6:

Petri Nets Talks (Coloured Petri Nets) - Room ESA W-221:

Veronica Gil Costa, Jair Lobos, Alonso Inostrosa-Psijas and Mauricio Marin - *Capacity Planning for Vertical Search Engines: An approach based on Coloured Petri Nets*

Joyce Nakatumba, Michael Westergaard and Wil van der Aalst - *An Infrastructure for Cost-Effective Testing of Operational Support Algorithms Based on Colored Petri Nets*

Štefan Korečko, Ján Marcinčin and Viliam Slodičák - *CPN Assistant II: A Tool for Management of Networked Simulations*

ACSD Talks - Room ESA C:

Walter Vogler, Christian Stahl and Richard Müller - *A Trace-Based Semantics for Responsiveness*

Hanifa Boucheneb and Kamel Barkaoui - *Reachability Analysis of P-Time Petri Nets with Parametric Markings*

Marc Solé and Josep Carmona - *A High-level Strategy for C-net Discovery*

12:00 - Lunch Break

13:30 - Session 7:

Petri Nets Talks (Application and High-Level Nets) - Room ESA W-221:

Debjyoti Bera, Kees van Hee and Jan Martijn van der Werf - *Designing Weakly Terminating ROS Systems*

Frederic Cristini and Catherine Tessier - *Nets-within-nets to model innovative space system architectures*

Frank Heitmann and Michael Köhler-Bußmeier - *P- and T-Systems in the Nets-within-Nets-Formalism*

ACSD Talks - Room ESA C:

Jasen Markovski and Michel Reniers - *Verifying Performance of Supervised Plants*

Souheib Baarir, Maximilien Colange, Fabrice Kordon and Yann Thierry-Mieg - *State*

Space Analysis using Symmetries on Decision Diagrams

Luca Pazzi and Marco Pradelli - *Modularity and Part-Whole Compositionality for Computing the State Semantics of Statecharts*

15:00 - Break
15:15 - Closing Session - Room ESA W-221
16:00 - End of Conference

Wednesday, June 27th	*Petri Nets*		*ACSD*	
08:00	**Registration** **Room: Hörsaal ESA-W-221**			
08:30	**Opening Session** **Room: Hörsaal B**			
09:00	**Joost-Pieter Katoen** **Room: Hörsaal B**	*GSPNs Revisited: Simple Semantics and New Analysis Algorithms*	*Chair: J. Brandt*	
10:00	*Break*			
10:30	**Stochastic Nets** **Room: Hörsaal ESA-C**	*Chair: S. Haddad*	**Session 1** **Room: Hörsaal ESA-W-221**	*Chair: J. Desel*
	T. Mailund, A. Halager and M. Westergaard	*Using Colored Petri Nets to Construct Coalescent Hidden Markov Models: Automatic Translation from Demographic Specifications to Efficient Inference Methods*	T. Strazny and R. Meyer	*An Algorithmic Framework for Coverability in Well-Structured Systems*
	S. Spinner, S. Kounev and P. Meier	*Stochastic Modeling and Analysis using QPME: Queueing Petri Net Modeling Environment v2.0*	L. Mikulski and M. Koutny	*Hasse Diagrams of Combined Traces*
	M. Heiner, M. Herajy, F. Liu, C. Rohr and M. Schwarick	*Snoopy -- a unifying Petri net tool*	A. Mokhov, V. Khomenko, A. Alekseyev and A. Yakovlev	*Algebra of Parametrised Graphs*
12:00	*Lunch Break*			
13:45	**Process Mining** **Room: Hörsaal ESA-C**	*Chair: J. Desel*	**Session 2** **Room: Hörsaal ESA-W-221**	*Chair: T. Chatain*
	M. Solé and J. Carmona	*SMT-based Discovery Algorithm for C-nets*	J. Esparza and C. Kern	*Reactive and Proactive Diagnosis of Distributed Systems using Net Unfoldings*
	W. Van Der Aalst	*Decomposing Process Mining Problems Using Passages*	S. Linker	*Translating Structural Process Properties to Petri Net Markings*
14:45	*Break*			
15:00	**Bart Jacobs** **Room: Hörsaal C**	*Topics in Computer Security*	*Chair: A. Yakovlev*	
16:00	*Break*			
16:30	**Workflow Nets** **Room: Hörsaal ESA-O-221**	*Chair: W. Van der Aalst*	**Session 3** **Room: Hörsaal ESA-W-221**	*Chair: F. Kordon*
	G. Liu, J. Sun, Y. Liu and J. Dong	*Complexity of the Soundness Problem of Bounded Workflow Nets*	A. Mokhov, V. Khomenko, D. Sokolov and A. Yakovlev	*On Dual-Rail Control Logic for Enhanced Circuit Robustness*
	M. Martos-Salgado and F. Rosa-Velardo	*Cost Soundness for Priced Resource-Constrained Workflow nets*	A. Mundy, T. Mak, A. Yakovlev, S. Davidson and S. Furber	*Large-Scale On-Chip Dynamic Programming Network Inferences using Moderated Inter-Core Communication*
	E. Badouel	*On the alpha-Reconstructibility of Workflow Nets*	J. Lechner, M. Lampacher and T. Polzer	*A Robust Asynchronous Interfacing Scheme with Four-Phase Dual-Rail Coding*
18:00				

Thursday, June 28th	*Petri Nets*		*ACSD*	
09:00	**Sir C. A. R. (Tony) Hoare** **Room: Hörsaal A**	*Net Models for Concurrent Object Behaviour*	*Chair: M. Koutny*	
10:00	*Break*			
10:30	**Semantics** **Room: Hörsaal ESA-M**	*Chair: L. Pomello*	**Session 4** **Room: Hörsaal ESA-W-221**	*Chair: W. Vogler*
	M. Weidlich and J. M. van der Werf	*On Profiles and Footprints - Relational Semantics for Petri Nets*	A. Valmari	*All Linear-Time Congruences for Finite LTSs and Familiar Operators*
	Dirk Fahland and Robert Prüfer	*Data and Abstraction for Scenario-Based Modeling with Petri Nets*	M. Bezdeka, O. Bouda, L. Korenciak, M. Madzin, V. Rehak	*Sequence Chart Studio*
	X. Wang	*Maximal Confluent Processes*	R. J. Rodríguez, J. Julvez and J. Merseguer	*PeabraiN: A PIPE Extension for Performance Estimation and Resource Optimisation*
12:00	*Lunch Break*			
13:30	**Tool Demo** **Room: Hörsaal ESA-W-221**			
14:45	*Break*			
15:00	**Jens Sparsø** **Room: Hörsaal B**	*Networks-on-chip for real-time multi-processor systems-on-chip*	*Chair: M. Köhler-Bußmeier*	
16:00	*Break*			
16:30	**Verification** **Room: Hörsaal ESA-M**	*Chair: JM. Colom*	**Session 5** **Room: Hörsaal ESA-W-221**	*Chair: V. Khomenko*
	A. Valmari and H. Hansen	*Old and New Algorithms for Minimal Coverability sets*	O. Saarikivi, K. Kähkönen and K. Heljanko	*Improving Dynamic Partial Order Reductions for Concolic Testing*
	A. Lehmann, N. Lohmann and K. Wolf	*Stubborn Sets for Simple Linear Time Properties*	A. Siirtola, A. Puhakka and G. Lüttgen	*Introducing Fairness into Compositional Verification via Unidirectional Counters*
	S. Evangelista and L. Kristensen	*Hybrid LTL Model Checking with the Sweep-Line MethodHybrid LTL Model Checking with the Sweep-Line Method*	A. Bouakaz, J.-P. Talpin and J. Vitek	*Affine Data-Flow Graphs for the Synthesis of Hard Real-Time Applications*
	A. Rakow	*Safety Slicing Petri Nets*		
18:00				
18:30				

Friday, June 29th	*Petri Nets*		*ACSD*	
09:00	**Alain Finkel** *The Theory of WSTS: The Case of Complete WSTS* **Room: Hörsaal C**		*Chair: A. Valmari*	
10:00	*Break*			
10:30	**Coloured Petri Nets**	*Chair: F. Kordon*	**Session 6**	*Chair: M. Pietkiewicz-Koutny*
	Room: Hörsaal ESA-W-221		**Room: Hörsaal ESA-C**	
	V. Gil Costa, J. Lobos, A. Inostrosa-Psijas, M. Marin	*Capacity Planning for Vertical Search Engines: An approach based on Coloured Petri Nets*	W. Vogler, C. Stahl and R. Müller	*A Trace-Based Semantics for Responsiveness*
	J. Nakatumba, M. Westergaard and W. Van Der Aalst	*An Infrastructure for Cost-Effective Testing of Operational Support Algorithms Based on Colored Petri Nets*	H. Boucheneb and K. Barkaoui	*Reachability Analysis of P-Time Petri Nets with Parametric Markings*
	Š. Korečko, J. Marcinčin and V. Slodičák	*CPN Assistant II: A Tool for Management of Networked Simulations*	M. Solé and J. Carmona	*A High-level Strategy for C-net Discovery*
12:00	*Lunch Break*			
13:30	**Application and High-Level Nets**	*Chair: L. Petrucci*	**Session 7**	*Chair: K. Heljanko*
	Room: Hörsaal ESA-W-221		**Room: Hörsaal ESA-C**	
	D. Bera, K. Van Hee and J. M. Van Der Werf	*Designing Weakly Terminating ROS Systems*	J. Markovski and M. Reniers	*Verifying Performance of Supervised Plants*
	F. Cristini and C. Tessier	*Nets-within-nets to model innovative space system architectures*	S. Baarir, M. Colange, F. Kordon and Y. Thierry-Mieg	*State Space Analysis using Symmetries on Decision Diagrams*
	F. Heitmann and M. Köhler-Bußmeier	*P- and T-Systems in the Nets-within-Nets-Formalism*	L. Pazzi and M. Pradelli	*Modularity and Part-Whole Compositionality for Computing the State Semantics of Statecharts*
15:00	*Break*			
15:15	**Closing Session** **Hörsaal ESA-W-221**			
16:00				

7 Workshops

The check-in for the workshop starts Monday at 8:00 at the **Informatics Campus** (see map on page 10). At 8:45 there will be a joint opening for the workshops in room B-201 at the Informatics Campus. All invited talks are shared by all workshops and will take place in room B-201 Informatics Campus.

7.1 PNSE 2012

Petri Nets and Software Engineering

Lawrence Cabac, Michael Duvigneau, and Daniel Moldt

Monday, 25th June

08:45 - Opening

09:00 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Marwan
Petri Nets - an Integrative Framework for Advanced Biomodel Engineering

10:00 - Break

10:15 - Session 1 (Room F-132 Informatics Campus):

Kees Van Hee, Natalia Sidorova and Jan Martijn Van Der Werf - *When Can We Trust a Third Party? - A Soundness Perspective*

Agata Janowska, Wojciech Penczek, Agata Półrola and Andrzej Zbrzezny - *Using Integer Time Steps for Checking Branching Time Properties of Time Petri Nets*

11:15 - Break

11:45 - Session 2 (Room F-132 Informatics Campus):

Luca Bernardinello, Elisabetta Mangioni and Lucia Pomello - *Local state refinement on Elementary Net Systems: an approach based on morphisms*

Nicolás Cardozo, Jorge Vallejos, Sebastián González, Kim Mens and Theo D'Hondt - *Context Petri Nets: Enabling Consistent Composition of Context-dependent Behavior*

Thomas Irgang, Andreas Harrer and Robin Bergenthum - *MuPSi - a multitouch Petri net simulator for transition steps*

Julian Burkhart and Michael Haustermann - *PetriPad – A Collaborative Petri Net Editor*

13:15 - Lunch

14:45 - Session 3 (Room F-132 Informatics Campus):

Matthias Wester-Ebbinghaus and Michael Köhler-Bußmeier - *Model-Driven Middleware Support for Team-Oriented Process Management*

Joint Talk with LAM

Short Break

Michael Westergaard, Dirk Fahland and Christian Stahl - *Grade/CPN: Semi-automatic Support for Teaching Petri Nets by Checking Many Petri Nets Against One Specification*

Wojciech Penczek and Michał Knapik - *SMT-based parameter synthesis for L/U automata*

16:20 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Julia Padberg
Reconfigurable Petri Nets: Modeling and Analysis

17:45 - End of talks

Tuesday, 26th June

09:00 - Invited Talk (Room B-201 Informatics Campus):
Karsten Wolf
Developing and Integrating Petri net tools - an experience report

10:00 - Break

10:15 - Joint Session with WooPS (Room D-125 Informatics Campus)

Carlo Ferigato, Elisabetta Mangioni - *Inference of Local Properties in Petri Nets Composed through an Interface*

Michael Köhler-Bußmeier - *Analysing Model Transformations in SONAR*

Yann Ben Maissa, Fabrice Kordon, Salma Mouline and Yann Thierry-Mieg - *Modeling and Analyzing Wireless Sensor Networks with VeriSensor*

11:45 - Break

12:00 - Poster- and Tool-Session (Room: D-125 Informatics Campus)

12:30 - Poster- and Tool-Demo (Room: D-125 Informatics Campus)

13:15 - Lunch

15:00 - Session 5 (Room: C-221 Informatics Campus)

Kamila Agata Barylska and Edward Ochmański - *Hierarchy of persistency with respect to the length of action's disability*

Anna Dedova and Laure Petrucci - *From Code to Coloured Petri Nets: Modelling Guidelines*

Closing

16:15 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Reisig
What should we teach about Petri nets?

17:45 - End of talks

7.2 BioPPN 2012

Biological Processes and Petri Nets

Workshop Chairs: *Monika Heiner and Ralf Hofestaedt*

Room: D-129 Informatics Campus

Monday, 25th June

08:45 - Opening

09:00 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Marwan
Petri Nets - an Integrative Framework for Advanced Biomodel Engineering

10:00 - Break

10:15 - Session A: Analysis Techniques (Room D-129 Informatics Campus)

Paolo Baldan, Nicoletta Cocco, Marta Simeoni - *Comparison of Metabolic Pathways by Considering Potential Fluxes*

Christian Rohr - *Simulative Model Checking of Steady-State and Time-Unbounded Temporal Operators*

11:15 - Break

11:30 - Session B: Hybrid Petri Nets (Room D-129 Informatics Campus)

Sabrina Proß, Sebastian Jan Janowski, Bernhard Bachmann, Christian Kaltschmidt, Barbara Kaltschmidt - PNlib – A Modelica Library for Simulation of Biological Systems Based on Extended Hybrid Petri Nets

Mostafa Herajy, Martin Schwarick - *A Hybrid Petri Net Model of the Eukaryotic Cell Cycle*

12:30 - Lunch

13:30 - Session C: Applications (Room D-129 Informatics Campus)

Nicholas Stoy, Sophie Chen, Andrzej Kierzek - *Studying prostate cancer as a network disease by qualitative computer simulation with Petri Nets*

Marta Ewa Polak - *Modelling Atopic Dermatitis using Petri Nets*

14:30 - Break

15:00 - Session D: Tools (Room D-129 Informatics Campus)

Anja Hartmann, Hendrik Rohn, Kevin Pucknat, Falk Schreiber - *Petri-nets in VANTED: Simulation of Barley Seed Metabolism*

Mary Ann Blaetke, Wolfgang Marwan - *A Database-supported Modular Modelling Platform for Systems and Synthetic Biology*

16:00 - Closing Discussion

16:15 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Julia Padberg
Reconfigurable Petri Nets: Modeling and Analysis

17:45 - End of talks

7.3 LAM 2012

Logics, Agents, and Mobility

Chairs: *Berndt Müller (Farwer) and Michael Köhler-Bußmeier*

Room: C-215 Informatics Campus, except where indicated otherwise

Monday, 25th June

08:45 - Opening

09:00 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Marwan
Petri Nets - an Integrative Framework for Advanced Biomodel Engineering

10:00 - Break

10:15 - Joint Session with PNSE (Room F-132 Informatics Campus):

Kees van Hee, Natalia Sidorova and Jan Martijn van der Werf - *When Can We Trust a Third Party? - A Soundness Perspective*

Agata Janowska, Wojciech Penczek, Agata Półrola and Andrzej Zbrzezny - *Using Integer Time Steps for Checking Branching Time Properties of Time Petri Nets*

11:15 - Break

11:45 - Session 2 (Room C-104 Informatics Campus)

José Martín Castro-Manzano - *Modelling Intentional Reasoning with Defeasible and Temporal Logic*

12:30 - Lunch

13:45 - Session 3 (Room C-104 Informatics Campus)

Artur Męski, Wojciech Penczek, Maciej Szreter - *BDD-based Bounded Model Checking for LTLK over Two Variants of Interpreted Systems*

14:30 - Break

14:45 - Joint Talk with PNSE (Room F-132 Informatics Campus)
Michael Westergaard, Dirk Fahland and Christian Stahl - *Grade/CPN: Semi-automatic*

Support for Teaching Petri Nets by Checking Many Petri Nets Against One Specification

Short break to change rooms

15:20 - Session 4 (Room C-104 Informatics Campus)

Frank Heitmann, Michael Köhler-Bußmeier - *A Mobility Logic for Object Net Systems*

16:05 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Julia Padberg
Reconfigurable Petri Nets: Modeling and Analysis

17:45 - End of talks

7.4 WooPS 2012

Petri Net-based Security

Rafael Accorsi, Tadao Murata, and Silvio Ranise

Tuesday, 26th June

09:00 - Invited Talk (Room B-201 Informatics Campus):
Karsten Wolf
Developing and Integrating Petri net tools - an experience report

10:00 - Break

10:15 - Session 1 (Room D-125 Informatics Campus):

Carlo Ferigato, Elisabetta Mangioni - *Inference of Local Properties in Petri Nets Composed through an Interface*

Michael Köhler-Bußmeier - *Analysing Model Transformations in SONAR*

Yann Ben Maissa, Fabrice Kordon, Salma Mouline and Yann Thierry-Mieg - *Modeling and Analyzing Wireless Sensor Networks with VeriSensor*

11:45 - Break

12:00 - Poster- and Tool-Session (Room: D-125 Informatics Campus)

12:30 - Poster- and Tool-Demo (Room: D-125 Informatics Campus)

13:15 - Lunch

15:00 - Joint Session with PNSE (Room: C-221 Informatics Campus)

Kamila Agata Barylska and Edward Ochmański - *Hierarchy of persistency with respect to the length of action's disability*

Anna Dedova and Laure Petrucci - *From Code to Coloured Petri Nets: Modelling Guidelines*

Closing

16:15 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Reisig
What should we teach about Petri nets?

17:45 - End of talks

7.5 CompoNet 2012

Petri Net Compositions

Hanna Klaudel and Franck Pommereau

Tuesday, 26th June

09:00 - Invited Talk (Room B-201 Informatics Campus):
Karsten Wolf
Developing and Integrating Petri net tools - an experience report

10:00 - Break

10:15 - Session 1 (Room C-221 Informatics Campus):

Richard Müller and Christian Stahl - *Deciding the Precongruence for Deadlock Freedom Using Operating Guideline*

Yves-Stan Le Cornec - *Compositional analysis of modular Petri nets using hierarchical state space abstraction*

11:45 - Break

12:00 - Poster and Tool Session (Room D-125 Informatics Campus)

12:45 - Lunch

14:00 - Session 2 (Room C-221 Informatics Campus)

Luca Bernardinello, Elisabetta Mangioni and Lucia Pomello - *Composition of Elementary Net Systems based on α-morphisms*

14:45 - Model Checking Contest (Room D-125 Informatics Campus)

16:15 - Break

16:45 - Invited Talk (Room B-201 Informatics Campus):
Wolfgang Reisig
What should we teach about Petri nets?

17:45 - End of talks

8 Petri Net Course & Tutorials

The Petri Net Course as well as the tutorials take place from Sunday to Tuesday at the **Informatics Campus** (see map on page 10). It offers a thorough introduction to Petri Nets in four half-day modules on Sunday and Monday. On Tuesday there is a choice between two full-day tutorial modules, the first one on the topic of *Hybrid & Fluid Petri Nets*, the second one on *Net Unfoldings*. Each module of the course can be taken separately. In particular, the advanced tutorials on Tuesday can be followed as independent events.

Sunday, June 24th

Module 1: Basic net classes

Lecturers: Jörg Desel/Jetty Kleijn

Room: D-125 Informatics Campus

Timeslots: **09:30 – 11:00** and
11:30 – 13:00

Content: This is the introductory module to the Petri Net Course and as such provides key concepts and definitions underlying almost every Petri net model. Guided by a motivating example, principles of net theory are discussed highlighting local dynamics and concurrency. Two basic net classes are introduced and investigated: Place/Transition Systems and Elementary Net (EN) Systems. We consider the occurrence rule (token game), reachability, state graph, behavioural properties like deadlock and boundedness, behavioural equivalence and normal forms. The fundamental situations causality, conflict, concurrency, and confusion are explained in the context of EN Systems. We discuss EN system behaviour in terms of sequential and non-sequential observations. Finally, basic analysis techniques are presented to establish structural properties of nets.

13:00 – 14:30 - Lunch

Module 2: Coloured Petri Nets 1 (Modelling)

Lecturers: Lars Kristensen

Room: D-125 Informatics Campus

Timeslots: **14:30 – 16:00** and

16:30 – 18:00

Content: This module focuses on the constructs and definition of the Coloured Petri Nets (CPN) modelling language. CPNs belong to the class of high-level Petri nets and combines Petri Nets with the functional programming language Standard ML (SML). Petri nets provides the primitives for modelling concurrency, communication, and synchronisation while SML provides the primitives for modelling data manipulation and for creating compact and parameterised models. CPNs and the supporting computer tool CPN Tools have been widely used in practice for modelling and validating a wide range of concurrent software systems.

Having completed this module the participants will be able to:

- explain and use the basic constructs of the CPN modelling language
- explain the syntax and semantics of CPNs
- apply CPN Tools for construction and simulation of medium-sized CPN models

The module includes hands-on experiments with CPN Tools.

Monday, June 25th

Module 3: Coloured Petri Nets 2 (Analysis)

Lecturers: Lars Kristensen

Room: C-221 Informatics Campus

Timeslots: **08:45 – 10:15** and

10:45 – 12:15

Content: Explicit state space exploration is one of the main approaches to computer-aided verification of concurrent systems, and it is one of the main analysis methods for Coloured Petri Nets (CPNs). This module provides an introduction to state space methods in the context of CPNs, and explains how standard behavioural properties of CPNs can be verified fully automatically using state spaces and the support for state space analysis provided by CPN Tools.

Having completed this module the participants will be able to:

- define standard behavioural properties of CPNs
- explain the basic concepts of state spaces and how they are computed
- explain how basic behavioural properties can be verified from state spaces
- apply state spaces for verification of medium-sized CPN models

The module includes hands-on experience with CPN Tools and examples of industrial applications of state space methods.

12:15 – 13:45 - Lunch

Module 4: Timed and Stochastic Petri Nets

Lecturers: Susanna Donatelli, Serge Haddad

Room: C-221 Informatics Campus

Timeslots: **13:45 – 15:15** and
15:45 – 17:15

Content: This module presents different ways to introduce time in Petri nets. The focus will be on two models, where time is associated with the firing delay of transitions. In time Petri nets (TPN), the delay is non-deterministically chosen within an interval. We describe the class graph construction, which is the main analysis tool of TPNs. In generalized stochastic Petri nets (GSPN) the delay is obtained by sampling a random variable. For particular kinds of distributions, we describe the construction of a continuous time Markov chain on which the main performance indices can be computed.

Tuesday, June 26th

Tutorial Module 1: Fluid and Hybrid Nets

Lecturers: Manuel Silva, Cristian Mahulea

Room: C-104 Informatics Campus

Timeslots: **08:45 – 10:15**
10:45 – 12:15
12:15 – 13:45 Lunch Break
13:45 – 15:15
15:45 – 17:15

Content: This tutorial module will present the fluidization of discrete event dynamic systems (DEDS), as a relaxation technique for dealing with the classical state explosion problem. This is of particular interest when dealing with heavily loaded DEDS, which appear in many application domains like manufactoring, traffic, logistics of bio-chemical systems.

Following topics are considered in this tutorial:

- Autonomous (untimed) and timed fluid models.
- Relations among discrete and fluid "views" of a DEDS
- Limitation of the fluidization approach
- Improvement of fluid approximations: removing spurious solutions and stochastic fluid models
- Structural analysis of fluid PN models
- Observability and observers. Controllability and controllers
- Application examples using SimHPN toolbox

Important: Participants are encouraged to bring their own laptop with MATLAB installed on it if they want to use the relevant tool and get a hands-on experience.

Tutorial Module 2: Net Unfoldings

Lecturers: Thomas Chatain, Stefan Haar, Victor Khomenko, G. Michele Pinna

Room: C-215 Informatics Campus

Timeslots: **08:45 – 10:15**

10:45 – 12:15

12:15 – 13:45 Lunch Break

13:45 – 15:15

15:45 – 17:15

Content: Petri net unfoldings is a prominent formalism for the description and analysis of concurrent systems. This course will provide a general introduction into unfoldings, unfolding based formal verification and applications of unfoldings. These will be combined with demonstration of some practical unfolding-based tools. Moreover, a number of recent ideas will be considered in more detail, including the reveals relation, symbolic prefixes, and merged processes and related models.

Workshop / Petri Net Course Schedule (Sunday 24th June – Tuesday 26th June)

Sunday	Course
08:45	
09:00	
09:15	
09:30	D-125
09:45	**Basic Net**
10:00	**Classes**
10:15	
10:30	
10:45	
11:00	
11:15	
11:30	D-125
11:45	
12:00	
12:15	
12:30	
12:45	
13:00	Lunch
13:15	
13:30	
13:45	
14:00	
14:15	
14:30	D-125
14:45	**Coloiured**
15:00	**Petri Nets 1**
15:15	**(Modelling)**
15:30	
15:45	
16:00	
16:15	
16:30	D-125
16:45	
17:00	
17:15	
17:30	
17:45	

Monday	PNSE	LAM	BioPPN	Course
08:45	**Opening**		B-201	C-221
09:00	**Invited Talk**		B-201	**Coloured**
09:15	**Wolfgang Marwan**			**Petri Nets 2**
09:30				**(Analysis)**
09:45				
10:00				
10:15		F-132	D-129	
10:30	Long 1		Talk 1	
10:45	Long 2		Talk 2	C-221
11:00				
11:15				
11:30				
11:45	F-132	C-104	D-129	
12:00	Short 1	Talk 1	Talk 3	
12:15	Short 2		Talk 4	Lunch
12:30	Short 3	Lunch		
12:45	Short 4		Lunch	
13:00				
13:15	Lunch			
13:30				
13:45		C-104		C-221
14:00		Talk 2	D-129	**Timed and**
14:15			Talk 5	**Stochastic**
14:30			Talk 6	**Petri Nets**
14:45		F-132		
15:00	Long 3			
15:15				
15:30	F-132	C-104	D-129	
15:45	Long 4	Talk 3	Talk 7	C-221
16:00	Long 5		Talk 8	
16:15				
16:30				
16:45	**Invited Talk**		B-201	
17:00	**Julia Padberg**			
17:15				
17:30				
17:45				

Tuesday	PNSE / Woops	CompoNET / MCC	Tutorial 1 Hybrid&Fluid	Tutorial 2 Unfoldings
08:45			C-104	C-215
09:00	**Invited Talk**	B-201		
09:15	**Karsten Wolf**			
09:30				
09:45				
10:00				
10:15	D-125	C-221		
10:30	Woops 1	Talk 1		
10:45			C-104	C-215
11:00	Woops 2	Talk 2		
11:15	Long 6			
11:30				
11:45				
12:00	Poster+Tool	D-125		
12:15	Session		Lunch	Lunch
12:30	Posters	D-125		
12:45	& Tool	Lunch		
13:00	Demos			
13:15	Lunch			
13:30				
13:45			C-104	C-215
14:00		C-221		
14:15		Talk 3		
14:30				
14:45		D-125		
15:00	C-221	Model Checking		
15:15	Long 7	Contest (MCC)		
15:30	Long 8			
15:45			C-104	C-215
16:00	Closing			
16:15				
16:30				
16:45	**Invited Talk**	B-201		
17:00	**Wolfgang Reisig**			
17:15				
17:30				
17:45				

All room numbers refer to the informatics campus.

9 Committees

Organising Committees

General and Organizing Chair: D. Moldt, Germany

Finance Chair: M. Köhler-Bußmeier, Germany

Tools Exhibition Chair: L. Cabac, Germany

Publicity Chairs: M. Duvigneau, Germany, T. Wagner, Germany

Local Workshops and Tutorials Chair: M. Hewelt, Germany

Workshops and Tutorials Chairs: A. Yakovlev, UK, W. van der Aalst, The Netherlands

Steering Committees

Petri Nets 2012

W. van der Aalst, The Netherlands
J. Billington, Australia
G. Ciardo, USA
J. Desel, Germany
S. Donatelli, Italy
S. Haddad, France
K. Hiraishi, Japan
K. Jensen, Denmark
J. Kleijn, The Netherlands
M. Koutny, UK (chair)
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

ACSD 2012

Benoit Caillaud, France
Jordi Cortadella, Spain
Jörg Desel, Germany
Alex Kondratyev, USA
Luciano Lavagno, Italy
Antti Valmari, Finland
Alex Yakovlev, UK (chair)

Programme Committees

Petri Nets 2012

G. Balbo, Italy
M. Bednarczyk, Poland
J. Billington, Australia
J. Carmona, Spain
G. Ciardo, USA
J.M. Colom, Spain
J. Desel, Germany
R. Devillers, Belgium
J. Esparza, Germany
D. Fahland, The Netherlands
A. Giua, Italy
L. Gomes, Portugal
S. Haddad, France (co-chair)
K. Hiraishi, Japan
R. Janicki, Canada
V. Khomenko, UK
E. Kindler, Denmark
J. Kleijn, The Netherlands
L.M. Kristensen, Norway
R. Lazic, UK
C. Lin, China
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