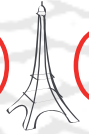


CONCUR 2010



21st international conference on
Concurrency Theory

Paris, France
August 31st - September 3rd



INSTITUT NATIONAL
DE RECHERCHE
EN INFORMATIQUE
ET EN AUTOMATIQUE



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Tuesday, August 31st

8:30 – 9:00: Opening

9:00 – 10:30

Invited talk: Vladimiro Sassone, Sardaouna Hamadou and Mu Yang: *Trust in Anonymity Networks*

Laura Bocchi, Kohei Honda, Emilio Tuosto and Nobuko Yoshida: *A Theory of Design-by-Contract for Distributed Multiparty Interaction*

10:30 – 11:00: Coffee break

11:00 – 12:30

Lutz Schröder and Yde Venema: *Flat Coalgebraic Fixed Point Logic*

Cristian Prisacariu: *Modal Logic over Higher Dimensional Automata*

Ming Fu, Yong Li, Xinyu Feng, Zhong Shao and Yu Zhang: *Reasoning about Optimistic Concurrency Using a Program Logic for History*

12:30 – 14:00: Lunch

14:00 – 15:30

Invited talk: Maurice Herlihy: *Applications of Shellable Complexes to Distributed Computing*

Fides Aarts and Frits Vaandrager: *Learning I/O Automata*

15:30 – 16:00: Coffee break

16:00 – 17:30

Antoine Durand-Gasselín and Peter Habermehl: *On the use of non-deterministic automata for Presburger arithmetic*

Jochen Hoenicke, Roland Meyer and Ernst-Rüdiger Olderog: *Kleene, Rabin, and Scott are available*

Mohamed Faouzi Atig: *From Multi to Single Stack Automata*

19:00: Reception

Wednesday, September 1st

9:00 – 10:30

Invited talk: Anca Muscholl: *Taming Distributed Asynchronous Systems*

Pawel Sobocinski: *Representations of Petri net interactions*

10:30 – 11:00: Coffee break

11:00–12:30

Richard Mayr and Lorenzo Clemente: *Multipebble Simulations for Alternating Automata*

Stanislav Böhm, Stefan Göller and Petr Jancar: *Bisimilarity of one-counter processes is PSPACE-complete*

Pavol Cerny, Thomas Henzinger and Arjun Radhakrishna: *Simulation Distances*

12:30 – 14:00: Lunch

14:00 – 16:00 Milner session

Introduction : Jos Baeten

Edsko de Vries, Vasileios Koutavas and Matthew Hennessy: *Communicating Transactions*

Jean-Bernard Stefani, Claudio Mezzina and Ivan Lanese: *Reversing higher-order Pi*
Paolo Baldan and Silvia Crafa: *A Logic for True Concurrency*

16:00 – 16:30: Coffee break

16:30 – 18:00

Yuxi Fu: *Theory by Process*

Pietro Di Gianantonio, Svetlana Jaksic and Marina Lenisa: *Efficient Bisimilarities from Second-order Reaction Semantics for pi-calculus*

Romain Demangeon, Daniel Hirschhoff and Davide Sangiorgi: *Termination in impure concurrent languages*

9:00 – 10:30

Invited talk: Frank de Boer, Mohammad Mahdi Jaghoori and Einar Broch Johnsen: *Dating Concurrent Objects: Real-Time Modeling and Schedulability Analysis*

Tomas Brazdil, Vojtech Rehak, Jan Kretinsky, Jan Krcal and Antonin Kucera: *Stochastic Real-Time Games with Qualitative Timed Automata Objectives*

10:30 – 11:00: Coffee break

11:00 – 12:30

Patricia Bouyer, Romain Brenguier and Nicolas Markey: *Nash Equilibria for Reachability Objectives in Multi-player Timed Games*

Krishnendu Chatterjee, Florian Horn and Christof Löding: *Obliging Games*

R. Ramanujam and Sunil Easaw Simon: *A communication based model for games of imperfect information*

12:30 – 14:00: Lunch

14:00 – 15:30

Sara Capecchi, Ilaria Castellani, Mariangiola Dezani-Ciancaglini and Tamara Rezk: *Session types for access and information flow control*

Luis Caires and Frank Pfenning: *Session Types as Intuitionistic Linear Propositions*

Marco Giunti and Vasco Thudicum Vasconcelos: *A linear account of session types in the pi calculus*

15:30 – 16:00: Coffee break

20:00 Conference dinner

9:00 – 10:30

Invited talk: Christian Eisentraut, Holger Hermanns and Lijun Zhang: *Concurrency and Composition in a Stochastic World*

Pierre-Malo Deniérou and Nobuko Yoshida: *Buffered Communication Analysis in Distributed Multiparty Sessions*

10:30 – 11:00: Coffee break

11:00 – 12:30

Krishnendu Chatterjee, Laurent Doyen, Herbert Edelsbrunner, Thomas Henzinger and Philippe Rannou: *Mean-Payoff Automaton Expressions*

Andrea Turrini and Roberto Segala: *Conditional Automata: a Tool for Safe Removal of Negligible Events*

Ichiro Hasuo: *Generic Forward and Backward Simulations II: Probabilistic Simulation*

12:30 – 14:00: Lunch

14:00 – 15:30

Ahmed Rezine, Giorgio Delzanno, Parosh Abdulla, Yu-Fang Chen, Chih-Duo Hong and Frederic Haziza: *Constrained Monotonic Abstraction: a CEGAR for Parameterized Verification*

Giorgio Delzanno, Arnaud Sangnier and Gianluigi Zavattaro: *Parameterized Verification of Ad Hoc Networks*

Tim Willemse: *Consistent Correlations for Parameterised Boolean Equation Systems with Applications in Correctness Proofs for Manipulations*

15:30 – 16:00: Coffee break

16:00 – 17:30

Mario S. Alvim, Miguel E. Andres and Catuscia Palamidessi: *Information Flow in Interactive Systems Document Actions*

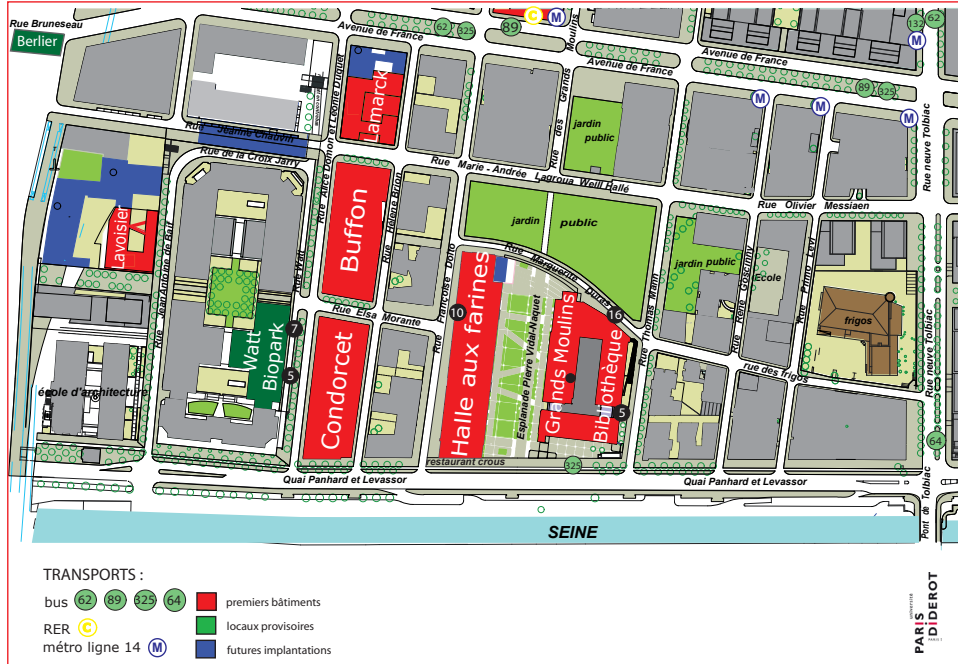
Emmanuel Haucourt and Thibaut Balabonski: *A Geometric Approach to the Problem of Unique Decomposition of Processes*

Dan Ghica and Mohamed Nabih Mena: *On the compositionality of round abstraction*

LOCAL INFORMATIONS

Conference venue

CONCUR 2010 will be held at University Paris-Diderot in the 13th district of Paris. The main conference room will be in the Buffon building (located in Hélène Brion street). The workshops (Monday, August 30th & Saturday, September 4th) will be located in the "Halle aux farines" building (see the local map)



Public transports

The easiest way to reach the conference location is to go to the metro station "Bibliothèque François Mitterrand" (Metro Line 14 or RER C). Then reaching University takes 5 minutes by walk.

Note: from the station, use the exit "avenue de France".

Buses 62, 64 and 89 can also be used to reach University (bus stops can be seen on the map).

About public transports

There are mainly two kinds of tickets for tourists.

The **T+ ticket** allows you to travel on metro lines, RER lines within Paris (zone 1) and in bus line. With one ticket, you have one trip (connexions metro/metro, metro/RER and

bus/bus are allowed, but not bus/metro).

You can buy T+ tickets at metro stations. The price of one ticket T+ is 1,70 € and a book of 10 T+ tickets costs 12 €.

The **Paris Visite travel card** allows to make unlimited and unrestricted trips.

The Paris Visite card is valid for 1, 2, 3 or 5 consecutive days in zones 1-3. You can use it in metro lines, RER lines and bus lines.

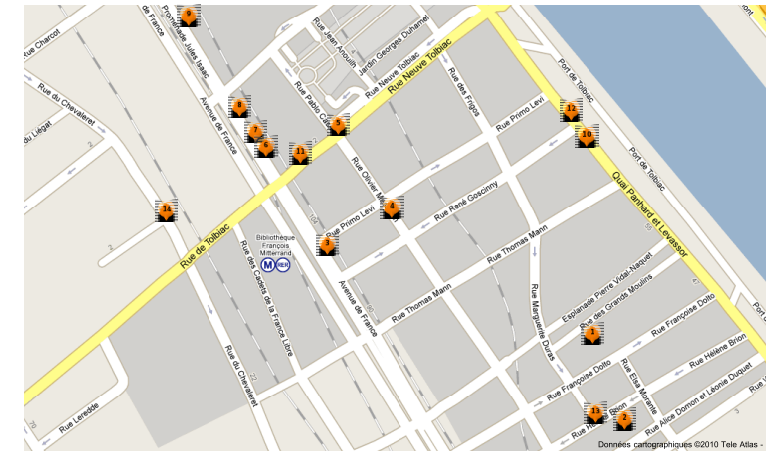
You can purchase your Paris Visite travel card from metro stations. The price for one day is 9 €, for two days is 14,7 €, three days is 20 € and for 5 days the price is 28,90 €.

Lunches around the campus

The map below gives a list of places where you can have lunch around the University. This list is not exhaustive: you can find many places, especially near Tolbiac street.

This only concerns the days of workshops (lunches and coffee breaks during the conference will be available in the hall of the Buffon building).

Restaurants around CONCUR



Marker	Info	Marker	Info	Marker	Info
	Halle aux farines: Workshops		Amphi Buffon: main conference site		Monoprix Supermarket
	Monoprix Supermarket		Lina's Sandwiches 17 rue Olivier Messiaen		The frog Pub / Restaurant 114 Avenue de France
	Exki Organic food restaurant 118, avenue de France		L'avenue Restaurant 120 Avenue de France		M Cafe Snack 128 Avenue de France
	La Brasserie des Grands Moulins Brasserie (pub) 73, quai Panhard et Levasor Closed on Saturday		Fill'O'Fromage Cheese and wine 12 Rue Neuve Tolbiac		Boulangerie Kayser Sandwiches 77 Quai Panhard et Levasor
	Urban Pasta Pastas 18 Rue Helene Brion Closed on Saturday		Pizza d'Italia Pizzas 107 Rue du Chevaleret Closed on Saturday		

Reception

On Monday August 31st, there will be a reception in the City Hall of Paris. The address is: 3, rue de Lobau (metro station: Hotel de Ville, line 1) and the time is 19:00.



Two important points: don't be late! and take your invitation!

Conference Dinner

The conference dinner will be on Thursday September 3th. More information will be given during the conference.

CONCUR Football match

The traditional CONCUR football match will be on Thursday September 3th after the last session of the afternoon. The meeting point is in front of the conference room at 16:00.

Internet access

There is a WLAN connection. Details can be found at the registration desk and in the conference room.

Visiting Paris

At the registration desk, you can find guides of Paris as well as practical information about the museums, events, and main attractions at Paris. You can also take a look at the web site <http://www.new-paris-ile-de-france.co.uk/>.

We can help you to buy electronic tickets for the main museums at Paris.

Notice that the 5th of September, all the national museums of Paris are free of access.

WORKSHOPS

The workshops (Monday, August 30th & Saturday, September 4th) will be located in the "Halle aux farines" building (area F, third floor).

Pre-workshops (Monday, August 30th)

- SOS 2010: room 379F
- EXPRESS'10: room 378F
- SecCo 2010: room 380F
- FIT 2010: room 381F

Post-Workshops (Saturday, September 4th)

- GASICS'10: room 381F
- DOTS'10: room 380F
- FOCLASA 2010: room 379F
- YR-CONCUR 2010: room 378F

Pre-Workshops: (August 30th)

Structural Operational Semantics 2010, SOS 2010

- | | |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:20-9:30 | Welcome |
| 9:30-10:30 | Invited talk: MohammadReza Mousavi. TBA |
| 10:30-11:00 | Coffee break |
| 11:00-11:30 | Ignacio Fábregas, David de Frutos Escrig and Miguel Palomino: <i>Equational Characterization of Covariant-Contravariant Simulation and Conformance Simulation Semantics</i> |
| 11:30-12:00 | Maciej Gazda and Wan Fokkink: <i>Congruence from the Operator's Point of View: Compositionality Requirements on Process Semantics</i> |
| 12:00-14:00 | Lunch break |
| 14:00-15:00 | Invited talk (joint with EXPRESS'10): Catuscia Palamidessi. TBA |
| 15:00-15:30 | Tobias Heindel: <i>Structural Decomposition of Reactions of Graph-Like Objects</i> |
| 15:30-16:00 | Coffee break |
| 16:00-16:30 | Harsh Beohar, Damian Nades, Bert van Beek and Pieter Cuijpers: <i>Superstates in the compositional interchange format (CIF)</i> |
| 16:30-17:00 | Keiko Nakata and Tarmo Uustalu: <i>Resumptions, Weak Bisimilarity and Big-Step Semantics for While with Interactive I/O: An Exercise in Mixed Induction-Coinduction</i> |
| 17:00-17:10 | Closing |

Workshop on Expressiveness in Concurrency, EXPRESS'10

- 9:00–10:00 Invited talk: Daniele Varaca: *Causality in the pi-calculus.*
- 10:00–10:30 Roberto Gorrieri and Cristian Versari: *A Process Calculus for Expressing Finite Place/Transition Petri Nets.*
- 10:30–11:00 Coffee break
- 11:00–12:30 Diego Figueira, Sawomir Lasota and Piotr Hofman: *Relating timed and register automata*
- Jos Baeten, Bas Luttik, Tim Muller and Paul van Tilburg: *Expressiveness modulo Bisimilarity of Regular Expressions with Parallel Composition.*
- Peter Mosses, Mohammadreza Mousavi and Michel Reniers: *Robustness of Equations Under Operational Extensions*
- 12:30–14:00 Lunch
- 14:00–15:00 Invited talk (joint with SOS'10): Catuscia Palamidessi: *Compositionality of Secure Information Flow.*
- 15:00–15:30 Gavin Lowe: *Models for CSP with availability information*
- 15:30–16:00 Coffee break
- 16:00–17:30 Ugo Dal Lago, Simone Martini and Davide Sangiorgi: *Light Logics and Higher Order Processes*
- Andrea Cerone and Matthew Hennessy: *Process Behaviour: formulae versus tests*
- Lasse Nielsen, Nobuko Yoshida and Kohei Honda: *Multiparty Symmetric Sum Types.*
- 17:30–18:30 Federico Banti, Rosario Pugliese and Francesco Tiezzi: *A criterion for separating process calculi*
- Kirstin Peters and Uwe Nestmann: *Breaking Symmetries*

Workshop on Security Issues in Concurrency, SecCo 2010

- 9:20–9:30 Welcome
- 9:30–10:30 Invited talk: Sjouke Mauw. TBA
- 10:30–11:00 Coffee break
- 11:00–11:30 Bernardo Toninho and Luis Caires: *A Spatial-Epistemic Logic for Reasoning about Security Protocols.*
- 11:30–12:00 Stephanie Delaune, Steve Kremer, Mark Ryan and Graham Steel: *A Formal Analysis of Authentication in the TPM (short paper)*
- 12:00–14:30 Lunch
- 14:30–15:30 Invited talk: Jean Goubault-Larrecq: *"Logic Wins!"*
- 15:30–16:00 Coffee break
- 16:00–16:30 Eike Best, Philippe Darondeau and Roberto Gorrieri: *On the Decidability of Non Interference over Unbounded Petri Nets.*
- 16:30–17:00 Loic Helouet and Aline Roumy: *Covert channel detection using Information Theory.*
- 17:00–17:10 Closing

8:45	Opening.
9:00-9:30	Jean-Baptiste Raclet: <i>Establishing liabilities from assume/guarantee contracts</i>
9:30-10:00	Rolf Hennicker, Sebastian Bauer and Stephan Janisch: <i>Interface Theories for (A)synchronously Communicating Modal I/O-Transition Systems</i>
10:00-10:30	Maria Grazia Buscemi and Hernan Melgratti: <i>Contracts for Abstract Processes in Service Composition</i>
10:30-11:00	Coffee break
11:00-12:00	Alexandre David: <i>Theory and Tool Compositional for Design and Analysis of Real Time Systems</i>
12:00-13:45	Lunch
13:45-14:30	Yassine Lakhnech. TBA
14:30-15:00	Andrzej Wasowski: <i>Notes on Structural and Logical Composition in Specification Theories</i>
15:00-15:30	Michael Mandler: <i>An Algebra of Synchronous Scheduling Interfaces</i>
15:30-16:00	Coffee break
16:30-17:30	Dirk Beyer: <i>Protocol Interfaces</i>

Workshop on Games for Design, Verification and Synthesis, GASICS'10

9:25-9:30	Welcome - Introduction
9:30-10:30	Invited talk (common with the DOTS workshop) : Krishnendu Chatterjee. TBA
10:30-11:00	Coffee break
11:00-11:30	Olivier Finkel: <i>Wadge Games Between 1-Counter Automata and Models of Set Theory</i>
11:30-12:00	Rüdiger Ehlers: <i>Generalised Rabin(1) synthesis</i>
12:00-12:30	Lois Vanhée and Sophie Pinchinat: <i>Computing the winning coalitions of a turn-based game with reachability objectives</i>
12:30-14:00	Lunch
14:00-15:00	Invited talk: Antonin Kucera. TBA
15:00-15:30	Evgeny Dantsin and Sergei Soloviev: <i>Games Evolving in Time: Computability of Winning Strategies Via Testing Hypotheses</i>
15:30-16:00	Coffee break
16:00-16:30	Catalin Dima, Constantin Enea, Dimitar Guelev and Ferucio Tiplea: <i>Positive and negative results on the model-checking problem for ATL with imperfect information</i>
16:30-17:00	Franck Cassez, Alexandre David, Kim G. Larsen, Jean-François Raskin and Pierre-Alain Reynier: <i>Controller Synthesis Based on On-Demand Partial Observations</i>
17:00-17:30	Nicolas Markey and Pierre-Alain Reynier: <i>1-clock priced timed automata with energy constraints and imperfect information</i>
17:30-17:31	Closing

Workshop on Distributed Open Timed Systems, DOTS'10

9:20-9:30	Welcome
9:30-10:30	Invited talk (common with the GASICS workshop): K. Chatterjee. TBA
10:30-11:00	Coffee break
11:00-11:30	F. Avellaneda, R. Morin: <i>Divergence and channel-bound of high-level message sequence charts revisited</i>
11:30-12:00	B. Bollig, S. Haar, L. Helouët: <i>Diagnosis with Dynamic MSC Languages</i>
12:00-12:30	P. Bouyer-Decitre, N. Markey, O. Sankur, C. Thrane: <i>Making Timed Automata Robust</i>
12:30-14:30	Lunch break
14:30-15:00	B. Grabiec, C. Jard, A. Legay: <i>Unfolding Petri nets under partial observation</i>
15:00-15:30	R. Jaubert, P.A. Reynier: <i>How robust is your favorite timed automaton?</i>
15:30-16:00	Coffee break

Workshop on the Foundations of Coordination Languages and Software Architectures, FOCLASA 2010

9:15-9:30	Opening session
9:30-10:30	Invited talk: Maarten van Steen: <i>Simplified Distributed Programming with Micro Objects</i>
10:30-11:00	Coffee break
11:00-12:30	<u>Session 1: Resources, Priorities, and Sensor Networks</u>
	Mayleen Lacouture, Hervé Grall and Thomas Ledoux: <i>CREOLE: a Universal Language for Creating, Requesting, Updating and Deleting Resources</i>
	Imene Benhafaiedh, Susanne Graf and Hammadi Khairallah: <i>Implementing Distributed Controllers for Systems with Priorities</i>
	Maryam Kamali, Linas Laibinis, Luigia Petre and Kaisa Sere: <i>Self-Recovering Sensor-Actor Networks</i>
12:30-14:00	Lunch
14:00-15:30	<u>Session 2: Data-Oriented Coordination and Adaptation</u>
	Javier Cubo, Ernesto Pimentel, Gwen Salaün and Carlos Canal: <i>Handling Data-Based Concurrency in Context-Aware Service Protocols</i>
	Aabdessamad Imine: <i>On Coordinating Collaborative Objects</i>
	José Antonio Martín and Ernesto Pimentel: <i>Behavioural Adaptation for Scalable Service Discovery</i>
15:30-16:00	Coffee break
16:00-17:00	<u>Session 3: Timed and Stochastic Systems</u>
	Young-Joo Moon, Alexandra Silva, Christian Krause and Farhad Arbab: <i>A Compositional Semantics for Stochastic Reo Connectors</i>
	Mohammad Mahdi Jaghoori and Tom Chothia: <i>Timed Automata Semantics for Analyzing Creol</i>
17:00-17:15	Closing session

Young Researchers Workshop on Concurrency Theory, YR-CONCUR 2010

- 9:10–9:15 Opening
- 9:15–9:40 Matteo Cimini (Reykjavik University, IS): *On Rule Formats for Zero and Unit Elements*
- 9:40–10:05 Maciej Gazda (Vrije Universiteit Amsterdam, NL): *Turning GSOS Rules into Equations for Linear Time-Branching Time Semantics*
- 10:05–10:30 Paul van Tilburg (Eindhoven University of Technology, NL): *Reactive Turing Machines and ACPTau*
- 10:30–11:00 Coffee break
- 11:00–11:25 Mark Timmer (University of Twente, NL): *Confluence Reduction for Probabilistic Systems*
- 11:25–11:50 Falak Sher (RWTH Aachen University, DE): *Compositional Abstraction and Refinement of Probabilistic Automata*
- 11:50–12:15 Georgel Ionuþ Călin (Saarland University, DE): *Scheduler-Quantified Time-Bounded Reachability in Distributed Input/Output Interactive Probabilistic Chains*
- 12:30–14:15 Lunch break
- 14:15–14:40 Nathanaël Fijalkow (IST Austria, AT and ENS Cachan, FR): *Topological, Automata-Theoretic and Logical Characterization of Finitary Languages*
- 14:40–15:05 Fides Aarts (Radboud University Nijmegen, NL): *Inference and Abstraction of the Biometric Passport*
- 15:05–15:30 Alexander Heußner (Université Bordeaux 1, LaBRI, FR): *Run Graphs of Communicating Processes and MSO*
- 15:30–16:00 Coffee break
- 16:00–16:25 Harsh Beohar (Eindhoven University of Technology, NL): *A Short Note on Desynchronisable Closed Loop System*
- 16:25–16:50 Andrés A. Aristizábal P. (CNRS, LIX, École Polytechnique, FR): *Bisimilarity in Concurrent Constraint Programming*
- 16:50–17:15 Thomas Given-Wilson (University of Technology Sydney, AU): *Concurrent Pattern Calculus in bondi*