PRACTICAL INFORMATION

Inria Address:
655 Avenue de l’Europe,
38330 Montbonnot-Saint-Martin
+33 (0)4 76 61 52 00

CONTACTS:

Registration/ Organization
INSIGHT OUTSIDE
39 chemin du vieux chêne - 38240 Meylan
Tel: +33 825 595 525 (0,15€/min*)
Fax: +33 4 38 38 18 19
Email: discotec2015@insight-outside.fr

Inria:
Sophie AZZARO
Inria Grenoble - Rhône-Alpes
655, avenue de l’Europe
38330 Montbonnot
Email: sophie.azzaro@inria.fr
Tel: +33 (0)4 76 61 52 51

SHUTTLE TIMES:
A daily shuttle service is organized from Grenoble Station (Bus Station) to Inria Montbonnot.

TUESDAY JUNE 2:
Outward trip: Departure from Grenoble Station at 07:30
Return trip: Departures from Inria at 17:45 and 18:00.

WEDNESDAY JUNE 3:
Outward trip: Departure from Grenoble Station at 08:15
Return trip: Departure from Inria at 17:45 and 18:00.
A first stop will be done at the Grenoble Cable Car, followed by a final stop at Grenoble Station.

THURSDAY JUNE 4:
Outward trip: Departure from Grenoble Station at 08:15
Return trip: Departures from Inria at 14:45 and 18:15.

FRIDAY JUNE 5:
Outward trip: Departure from Grenoble Station at 08:15
Return trip: Departure from Inria at 18:15.

Grenoble Tourist Information Office:
14, rue de la République - +33 (0)4 76 42 41 41
# DISCOTEC 2015 Program Overview

## Day 1
**Tuesday, June 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td><strong>PLENARY</strong>&lt;br&gt;Keynote: Alois Ferscha</td>
</tr>
<tr>
<td>10:30</td>
<td><strong>PLENARY</strong>&lt;br&gt;Keynote: Willy Zwaenepoel</td>
</tr>
</tbody>
</table>

**Break 10:30 - 11:00**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td><strong>PLENARY</strong>&lt;br&gt;Joint Session (COORDINATION, DAIS, FORTE)</td>
</tr>
<tr>
<td>12:30</td>
<td><strong>- COORDINATION, Session 3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- DAIS, Session 3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- FORTE, Session 3</strong></td>
</tr>
</tbody>
</table>

**Lunch 12:30 - 14:00**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td><strong>- COORDINATION, Session 1</strong></td>
</tr>
<tr>
<td>15:30</td>
<td><strong>- DAIS, Session 1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- FORTE, Session 1</strong></td>
</tr>
</tbody>
</table>

**Break 15:30 - 16:00**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00</td>
<td><strong>- COORDINATION, Session 2</strong></td>
</tr>
<tr>
<td>17:30</td>
<td><strong>- DAIS, Session 2</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- FORTE, Session 2</strong></td>
</tr>
</tbody>
</table>

**PLENARY**<br>DisCoTec 10th Anniversary Panel

**Gala Dinner (20:00)**

---

## Day 2
**Wednesday, June 3**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09h00</td>
<td><strong>PLENARY</strong>&lt;br&gt;Keynote: Leslie Lamport</td>
</tr>
</tbody>
</table>

**Break 10:30 - 11:00**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11h00</td>
<td><strong>- COORDINATION, Session 5</strong></td>
</tr>
<tr>
<td>12h30</td>
<td><strong>- DAIS, Session 5</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- FORTE, Session 5</strong></td>
</tr>
<tr>
<td></td>
<td><strong>13:00 – 13:30 : Closing (Plenary)</strong></td>
</tr>
</tbody>
</table>

**Lunch 13:30 -14:30**

**Afternoon**

**ICE WORKSHOP**<br>8th Interaction and Concurrency Experience

---

## Day 3
**Tuesday, June 4**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:30</td>
<td><strong>- ICE WORKSHOP</strong>&lt;br&gt;8th Interaction and Concurrency Experience</td>
</tr>
</tbody>
</table>

**Break 10:30 - 11:00**

**Lunch 12:30 - 14:00**

**- ICE WORKSHOP**<br>Formal Reasoning in Distributed Algorithms

**- MEMO WORKSHOP**<br>2nd International Workshop on Meta Models for Process Languages

---

## Day 4
**Friday, June 5**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td><strong>- ICE WORKSHOP</strong>&lt;br&gt;8th Interaction and Concurrency Experience</td>
</tr>
</tbody>
</table>

**- FRIDA WORKSHOP**<br>Formal Reasoning in Distributed Algorithms

**- MEMO WORKSHOP**<br>2nd International Workshop on Meta Models for Process Languages
PLENARY
8:00 - 8:50 Registration
8:50 - 9:00 Opening (Alain Girault, General Chair)
9:00 - 10:30 PLENARY Keynote #1: Alois Ferscha - Awareness as a Mechanism of Coordination in Planetary Scale Distributed Systems
10:30 - 11:00 Break
11:00 - 12:30 Joint Session (COORDINATION, DAIS, FORTE)
   - "A Fixpoint-based Calculus for Graph-shaped Computational Fields" Alberto Lluch Lafuente, Michele Loreti and Ugo Montanari
   - "Fully Distributed Privacy Preserving Mini-Batch Gradient Descent Learning" Gábor Danner and Mark Jelasity.
   - "Automatic Verification of Stabilization for Some Distributed Algorithms" Ritwika Ghosh and Sayan Mitra

12:30 - 14:00 Lunch

14:00 - 15:30 COORDINATION Session 1 - Tuple-based coordination
   - "Replica-based High-Performance Tuple Space Computing" Marina Andric, Rocco De Nicola and Alberto Lluch Lafuente
   - "Logic Fragments: a coordination model based on logic inference" Francesco Luca De Angelis and Giovanna Di Marzo Serugendo

14:00 - 15:30 DAIS Session 1 - Datastores
   - "X-Ray: Monitoring and analysis of distributed database queries" Pedro Guimarães and Jose Pereira
   - "Leader Election with a NewSQL Database" Salman Niazi, Mahmoud Ismail, Gautier Berthou and Jim Dowling
   - "Concise Server-Wide Causality Management for Eventually Consistent Data Stores" Ricardo Gonçalves, Paulo Sérgio Almeida, Carlos Baquero and Victor Fonte

14:00 - 15:30 FORTE Session 1 - Ensuring Properties of Distributed Systems
   - "Timely Dataflow: A Model" Martin Abadi and Michael Isard
   - "On partial order semantics for SAT/SMT-based symbolic encodings of weak memory concurrency" Alex Horn and Daniel Kroening
   - "Types for Deadlock-Free Higher-Order Programs" Luca Padovani and Luca Novara

15:30 - 16:00 Break

16:00 - 17:30 COORDINATION Session 2 - Constraints
   - "X-Ray: Monitoring and analysis of distributed database queries" Pedro Guimarães and Jose Pereira
   - "LiveCloudInspector: Towards Integrated IaaS Forensics in the Cloud" Julian Zach and Hans P. Reiser
   - "Replication of Recovery Log --- an Approach to Enhance SOA Reliability (short)" Anna Kobusinska

16:00 - 17:00 DAIS Session 2 - Cloud
   - "Fluidify: Decentralized Overlay Deployment in a Multi-Cloud World" Resmi Ariyattu and Francois Taiani
   - "Incentivising Resource Sharing in Federated Clouds (short)" Eduardo de Lucena Falcão, Francisco Brasilheiro, Andrey Brito and Jose Luís Vivas.
   - "Timely Dataflow: A Model" Martin Abadi and Michael Isard

16:00 - 17:00 FORTE Session 2 - Efficient Verification Techniques
   - "Sliced Path Prefixes - An Effective Method to Enable Refinement Selection" Dirk Beyer, Stefan Löwe and Philipp Wendler
   - "Extending Testing Automata to All LTL" Ala Eddine Ben Salem
9:00 - 10:30  PLENARY - Keynote #2: Willy Zwaenepoel
Analytics on Graphs with a Trillion Edges

10:30 - 11:00  Break

11:00 - 12:30  COORDINATION Session 3 - Coordinating ensembles
- "Dynamic Choreographies: Safe Runtime Updates of Distributed Applications" Mila Dalla Preda, Maurizio Gabbrielli, Saverio Giallorenzo, Ivan Lanese and Jacopo Mauro
- "Comingle: Distributed Logic Programming for Decentralized Mobile Ensembles" Edmund Soon Lee Lam, Iliano Cervesato and Nabeeha Fatima
- "Type Reconstruction Algorithms for Deadlock-Free and Lock-Free Linear \( \pi \) - Calculi" Luca Padovani, Tzu-Chun Chen and Andrea Tosatto

11:00 - 12:30  DAIS Session 3 - Scalability
- "Dynamic Message Processing and Transactional Memory in the Actor Model" Yaroslav Hayduk, Anita Sobe and Pascal Felber
- "Cheap and Cheerful: Trading Speed and Quality for Scalable Social-Recommenders" Anne-Marie Kermarrec, Francois Taiani and Juan M. Tirado
- "Similitude: Decentralised Adaptation in Large-Scale P2P Recommenders" Davide Frey, Anne-Marie Kermarrec, Christopher Maddock, Andreas Mauthe, Pierre-Louis Roman and Francois Taiani

11:00 - 12:30  FORTE Session 3 - Formal Models for concurrency and distribution
- "Dynamic Causality in Event Structures" Youssef Arbach, David S. Karcher, Kirstin Peters and Uwe Nestmann
- "Code Mobility Meets Self-organisation: a Higher-order Calculus of Computational Fields" Ferruccio Damiani, Mirko Viroli, Danilo Pianini and Jacob Beal
- "Loop Freedom in AODVv2" Kedar Namjoshi and Richard Trefler

12:30 - 14:00  Lunch

14:00 - 15:30  PLENARY - DisCoTec 10th Anniversary Panel:
DisCoTec Science, the Next 10 Years
Panelists: Erika Abraham, Ahmed Bouajjani, Frank de Boer, Rocco de Nicola, Kurt Geihs, Willy Zwaenepoel

15:30 - 16:00  Break

16:00 - 17:30  COORDINATION Session 4 - Agent-oriented techniques
- "Parallelisation and application of AD3 as a method for solving large scale combinatorial auctions" Francisco Cruz-Mencia, Antonio Espinosa, Juan Carlos Moure, Jesus Cerquides and Juan Antonio Rodriguez-Aguilar
- "Handling agent perception in heterogeneous distributed systems: a policy-based approach" Stephen Cranefield and Surangika Ranathunga
- "Blending Event-Based and Multi-Agent Systems around Coordination Abstractions" Andrea Omicini, Giancarlo Fortino and Stefano Mariani

16:00 - 17:30  DAIS Session 4 - Consistency and Performance
- "A CRDT Supporting Selective Undo for Collaborative Text Editing" Weihai Yu, Luc André and Claudia-Lavinia Ignat
- "Practical Evaluation of Large Scale Applications" Tiago Jorge, Francisco Maia, Miguel Matos, Jose Pereira and Rui Oliveira.

16:00 - 17:00  FORTE Session 4 - Security
- "Safe and simple isolation for an actor abstract machine" Benoit Claudel, Quentin Sabah and Jean-Bernard Stefani
- "Type checking privacy policies in the pi-calculus" Dimitrios Kouzapas and Anna Philippou
9:00 - 10:30 ___ PLENARY - Keynote #3 : Leslie Lamport
  What Should Math Have to do with Building Complex Distributed Systems?

10:30 - 11:00 __ Break

11:00 - 12:30 ___ COORDINATION Session 5 - Shared spaces
  - "Klaim-DB: A Modeling Language for Distributed Database Applications" Xi Wu, Ximeng Li, Alberto Lluch Lafuente, Flemming Nielson and Hanne Riis Nielson
  - "Open transactions on shared memory" Marino Miculan, Marco Peressotti and Andrea Toneguzzo
  - "VISIRI - Distributed complex event processing system for handling large number of queries" Malinda Kumarasinghe, Geeth Tharanga, Lasitha Weerasinghe, Ujitha Wickramaratne and Surangika Ranathunga

11:00 - 12:30 ___ DAIS Session 5 - Resource Management
  "Heterogeneous Resource Selection for Arbitrary HPC Applications in the Cloud" Anca Iordache, Eliya Buyukkaya and Guillaume Pierre.
  - "MERGi-MisS: Should I turn off my servers?" Mar Callau-Zori, Luciana Arantes, Julien Sopena and Pierre Sens
  - "Distributed Monitoring and Management of Exascale Systems in the Argo Project (short)" Swann Perarnau, Rajeev Thakur, Kamil Iskra, Ken Raffenetti, Franck Cappello, Rinku Gupta, Pete Beckman, Marc Snir, Henry Hoffmann, Martin Schulz and Barry Rountree

11:00 - 12:00 ___ FORTE Session 5 - Ensuring Properties of Distributed Systems
  - "Translation Validation for Synchronous Data-flow Specification in the SIGNAL Compiler" Van-Chan Ngo, Jean-Pierre Talpin and Thierry Gautier
  - "Faster linearizability checking via P-compositionalty" Alex Horn and Daniel Kroening

11:00 - 12:00 ___ FORTE Session 6 - Real Time Systems
  - "Compliance and subtyping in timed session types" Massimo Bartoletti, Tiziana Cimoli, Maurizio Murgia, Alessandro Sebastian Podda and Livio Pompianu
  - "Difference Bound Constraint Abstraction for Timed Automata Reachability Checking" Weifeng Wang and Li Jiao

13:00 - 13:30 ___ PLENARY - Closing
13:30 - 14:30 ___ Lunch
Wednesday June 3, 2015
From 20:00.
Restaurant « Chez le Pèr’Gras »
90 Chemin de la Bastille, 38700 La Tronche
Phone: +33 (0)4 76 42 09 47

Departure from the Bastille Cable Car: Quai Stéphane Jay - 38000 Grenoble
Arrival at the Cable Car between 18:00 and 19:30.
Please do not forget to bring the ticket delivered in your conference attendee bag.

In the heart of Grenoble, welcome to La Bastille, a small fortified mountain located at the crossroad of three valleys, served by the first urban cable-car in the world. In a few minutes, day and night, the famous “bubbles” of Grenoble take you in the air from the center of the town up to the Bastille fortress. From the hilltop, you will discover the flattest town in France in its mountain setting! When the sun sets and the lights go down in the city, the view is outstanding.

Entertainment:
Magic Show,
by Claude Brun