

GRASTA-MAC 2015

joint workshops

7th workshop on GRaph Searching, Theory and Applications

5th workshop on Moving And Computing

October 19-23rd, 2015, Montréal, Canada



Merci à Christelle pour la photo

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Université 
de Montréal



Inria
INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE



Université
Nice
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Program

Monday, 19th October

9:00 - 9:30	Registration, Welcome
9:30 - 10:30	<p>Tutorial 1</p> <p>Fedor V. Fomin, Univ. Bergen, Norway Graph Searching (slides)</p>
10:30 - 11:00	Coffee Break
11:00 - 12:00	<p>Tutorial 2</p> <p>Nicola Santoro, Carleton University, Ottawa, Canada Models for computational mobile entities (slides and slides2)</p>
12:00 - 14:00	Lunch
14:00 - 15:00	<p>Tutorial 3</p> <p>Nicolas Nisse, Inria, Univ. Nice Sophia Antipolis, CNRS, I3S, France Cops and Robber Games (slides)</p>
15:00 - 15:30	Coffee Break
15:30 - 16:30	<ul style="list-style-type: none"> • Andrzej Pelc, Université du Québec en Outaouais, Canada Rendezvous of communicating agents • Jérémy Chalopin, CNRS, LIF, Univ. Aix-Marseille, France Anonymous Graph Exploration with Binoculars (slides)

Tuesday, 20th October

09:30 - 10:30	<ul style="list-style-type: none"> • Anthony Bonato, Ryerson University, Toronto, Canada The game of Zombies and Survivors on graphs • Marcello Mamino, LIX, Ecole Polytechnique, Palaiseau, France On strategy recovery and mean payoff games (slides)
10:30 - 11:00	Coffee Break
11:00 - 12:00	<ul style="list-style-type: none"> • Pierre Fraigniaud, LIAFA, CNRS, Univ. Paris Diderot, France Decidability Classes for Mobile Agents Computing (slides) • Jurek Czyzowicz, Université du Québec en Outaouais, Canada Patrolling by faulty robot (slides)
12:00 - 14:00	Lunch
14:00 - 15:00	<ul style="list-style-type: none"> • Klaus-Tycho Förster, Department Electrical Engineering, ETH, Zürich, Switzerland Lower and Upper bounds for Online Directed Graph Exploration (slides) • Sruti Gan Chaudhuri, Jadavpur University, Kolkata, West Bengal, India Gathering of Asynchronous Oblivious Mobile Agents in a Tree (slides)
15:00 - 15:30	Coffee Break
15:30 - 16:30	<ul style="list-style-type: none"> • Alfredo Navarra, Univ. of Perugia, Italy Gathering on meeting-points: feasibility and optimality (slides) • Franck Petit, LIP6, Univ. Paris 6, France Optimal Torus Exploration by Oblivious Mobile Robots (slides)
16:30 - 18:00	Open Problems session (pdf and slides)
20:00 -	Gala dinner (Menu)

Wednesday, 21th October

09:30 - 10:30	<ul style="list-style-type: none"> • Noa Agmon, Bar-Ilan University, Israel Strategic path planning for robots in adversarial environments • Giuseppe Prencipe, Dipartimento di Informatica, Università di Pisa, Italy The power of lights for autonomous mobile robots (slides)
10:30 - 11:00	Coffee Break
11:00 - 12:30	<ul style="list-style-type: none"> • Matthias Fugger, Vienna University of Technology, Austria Influence systems: the Hegselmann-Krause systems • Frédéric Simard, Laval University, Québec, Canada A Generalized Model of Games of Cops and Robbers with Randomness (slides)

- [Paul Hunter](#), Univ. Libre de Bruxelles, Belgium
Quantitative Sabotage Games ([slides](#))

Free Afternoon

Thursday, 22th October

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| 09:00 - 10:30 | <ul style="list-style-type: none"> • Anissa Lamani, Kyushu University, Japan
Synchronization and oscillations in population protocols • Shantanu Das, LIF, Univ. Aix Marseille, France.
Distributed Tasks for Mobile Robots with Energy Constraints (slides) • Koichi Wada, Faculty of Science and Engineering, HOSEI University, Tokyo, Japan
A new model of mobile robots with lights and its computational power (slides) |
| 10:30 - 11:00 | Coffee Break |
| 11:00 - 12:00 | <ul style="list-style-type: none"> • Dariusz Dereniowski, Gdansk University of Technology, Poland
The searchlight problem for road networks (slides) • Elham Roshanbin, Dalhousie University, Halifax, Canada
On the complexity of the graph burning |
| 12:00 - 14:00 | Lunch |
| 14:00 - 15:00 | <ul style="list-style-type: none"> • Yukiko Yamauchi, Kyushu University, Japan
Formation Problems for Synchronous Mobile Robots in the Three Dimensional Euclidean Space (slides) • Giovanni Viglietta, University of Ottawa, Canada
Distributed Computing by Mobile Robots: Solving the Uniform Circle Formation Problem (slides) |
| 15:00 - 15:30 | Coffee Break |
| 15:30 - 16:30 | <ul style="list-style-type: none"> • Christian Scheideler, University of Paderborn, Germany
Leader election and shape formation with self-organizing programmable matter (slides) • Arnold Rosenberg, Northeastern University, Boston, USA
Cellular ANTomata: Principles, Problems, and Progress (slides) |
| 16:30 - | Open Problems session |

Friday, 23th October

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| 09:30 - 10:30 | <ul style="list-style-type: none"> • Spyros Angelopoulos, LIP6, CNRS, Univ. Pierre et Marie Curie, Paris, France
Further connections between ray searching and contract scheduling problems (slides) • Thomas Lidbetter, London School of Economics, UK
The expanding search ratio of a graph (slides) |
| 10:30 - 11:00 | Coffee Break |
| 11:00 - 11:30 | <ul style="list-style-type: none"> • Euripides Markou, University of Thessaly, Lamia, Greece
Mobile Agents Rendezvous in Mesh-Networks, in spite of a Malicious Agent (slides) |

End of the conference

last time modified : June 2015.