

Centre de recherches mathématiques  
Université de Montréal

Atelier «Systèmes stochastiques de particules en interaction»  
Du 18 au 23 mai 2009

*Workshop “Interacting stochastic particle systems”*  
*May 18-23, 2009*

## **HORAIRE / PROGRAM**

Conférences : salle 6214  
Pauses-café : salle 6245

*Lectures: Room 6214*  
*Coffee Breaks: Room 6245*

## Le lundi 18 mai 2009 / *Monday, May 18, 2009*

08:45 - 09:15 Café croissants (6245) / *Coffee & Croissants (6245)*

08:45 - 09:15 Inscription (5345) / *Registration (5345)*

09:15 - 10:00 **Kenneth Alexander** (University of Southern California)  
*“Polymer Depinning Transitions with Loop Exponent One”*

10:00 - 10:30 Pause-café / *Coffee break*  
(Salle / *Room* 6245)

10:30 - 11:15 **Amine Asselah** (Université Paris 12)  
*“Annealed Large Deviations for the Energy of a Polymer”*

11:15 - 12:00 **Dmitry Ioffe** (Technion - Israel Institute of Technology)  
*“Stretched Polymers in Random Environment”*

12:00 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 14:45 **Bálint Tóth** (Budapest University of Technology)  
*“Diffusivity bounds for some Durrett-Rogers polymer processes”*

14:45 - 15:30 **Benedek Valkó** (University of Wisconsin-Madison)  
*“On the Superdiffusive Behavior of the True Self-avoiding Walk in  $d = 2$ ”*

15:30 Réception de bienvenue (6245) / *Welcoming Reception (6245)*

Le mardi 19 mai 2009 / *Tuesday, May 19, 2009*

08:45 - 09:15 Café croissants (6245) / *Coffee & Croissants (6245)*

09:15 - 10:00 **Gideon Amir** (University of Toronto)  
*“The Speed Process of the Totally Asymmetric Exclusion Process (TASEP)”*

10:00 - 10:30 Pause-café / *Coffee break*  
(Salle / Room 6245)

10:30 - 11:15 **Márton Balázs** (Budapest University of Technology and Economics)  
*“Second Class Particles Can Perform Random Walks (in Some Cases)”*

11:15 - 12:00 **Ivan Corwin** (Courant Institute for Mathematical Sciences)  
*“Current Fluctuations for TASEP with Two-sided Densities”*

12:00 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 14:45 **Sunder Sethuraman** (Iowa State University)  
*“Large Deviations for a Tagged Particle in One-dimensional Symmetric simple exclusion”*

14:45 - 15:30 **Claudio Landim** (IMPA)  
*“Metastability of Reversible Condensed Zero Range Processes on a Finite Set”*

15:30 - 16:00 Pause-café / *Coffee break*  
(Salle / Room 6245)

16:00 - 16:45 **Stefan Grosskinsky** (University of Warwick)  
*“Zero-range condensation at criticality”*

Le mercredi 20 mai 2009 / *Wednesday, May 20, 2009*

08:45 - 09:15 Café croissants (6245) / *Coffee & Croissants (6245)*

09:15 - 10:00 **Stefano Olla** (Université de Paris - Dauphine)  
*“Heat Transport from Microscopic Dynamics: A Weak Coupling Approach”*

10:00 - 10:30 Pause-café / *Coffee break*  
(Salle / Room 6245)

10:30 - 11:15 **Eric Cator** (Delft University of Technology)  
*“Busemann Functions and Equilibrium Measures in Last Passage Percolation”*

11:15 - 12:00 **Jonathon Peterson** (University of Wisconsin-Madison)  
*“Current Fluctuations for a System of One-dimensional Random Walks in a Common Random Environment”*

12:00 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 14:45 **Alejandro F. Ramirez** (Pontificia Universidad Católica de Chile)  
*“Ballisticity Conditions for Random Walk in Random Environment”*

14:45 - 15:30 **Leonardo Rolla** (École Normale Supérieure)  
*“Phase Transition for Activated Random Walk Models”*

15:30 - 16:00 Pause-café / *Coffee break*  
(Salle / Room 6245)

16:00 - 16:30 **János Engländer** (University of California)  
*“An interacting branching model”*

16:30 - 17:00 **Joel Lebowitz** (Rutgers University)  
*“Human Rights Session”*

**Le jeudi 21 mai 2009 / Thursday, May 21, 2009**

**08:45 - 09:15** Café croissants (6245) / *Coffee & Croissants (6245)*

**09:15 - 10:00** **Cédric Bernardin** (ENS Lyon)  
*“Superdiffusivity for Asymmetric Energy Model in low dimension”*

**10:00 - 10:30** Pause-café / *Coffee break*  
 (Salle / Room 6245)

**10:30 - 11:15** **Ton Dieker** (Georgia Institute of Technology)  
*“Series Jackson Networks and Non-crossing Probabilities”*

**11:15 - 12:00** **Min Kang** (North Carolina State University)  
*“Study on a General AIMD Model of Transmission Control Protocol”*

**12:00 - 14:00** Pause-déjeuner / *Lunch break*

**14:00 - 14:45** **Tobias Kuna** (University Reading)  
*“Realizability of Point Processes”*

**Session - Communications brèves / Contributed Talks**

**14:45 - 15:00** **Mohar Guha** (University of Michigan Ann Arbor)  
*“Bounds on Coarsening rates for the diffusive Lifschitz-Slyozov-Wagner Equation”*

**15:00 - 15:15** **Kay Kirkpatrick** (MIT)  
*“Quantum many-body systems and the nonlinear Schrödinger equation”*

**15:15 - 15:45** Pause-café (6245) / *Coffee break (6245)*

**15:45 - 16:15** **Lorenzo Bertini** (Università degli Studi di Roma “La Sapienza”)  
*“Large deviations for the boundary driven weakly asymmetric exclusion process”*

## Le vendredi 22 mai 2009 / *Friday, May 22, 2009*

08:45 - 09:15 Café croissants (6245) / *Coffee & Croissants (6245)*

09:15 - 10:00 **Davide Gabrielli** (Universita dell'Aquila)  
*"The Non Equilibrium Thermodynamics of Piecewise Deterministic Markov Processes"*

10:00 - 10:30 Pause-café / *Coffee break*  
(Salle / Room 6245)

10:30 - 11:15 **Alessandro Giuliani** (Universita' di Roma Tre)  
*"Periodic Striped Minimizers in a 2D Model for Martensitic Phase Transitions"*

11:15 - 12:00 **Ilie Grigorescu** (University of Miami)  
*"Particle Systems and a Class of Diffusions with Jumps"*

12:00 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 14:45 **Vladislav Vysotsky** (University of Delaware)  
*"Mass Aggregation in the Stochastic Model of Sticky Particles"*

14:45 - 15:30 **Aleksander Yu. Orlov** (Institute for Oceanology)  
*"Random processes and integrable systems"*

15:30 Café, thé, biscuits (6245) / *Coffee, tea, cookies (6245)*