

Centre de recherches mathématiques
Université de Montréal

Atelier «Systèmes désordonnés : verres de spin»
Du 8 au 13 juin 2009

Workshop “Disordered systems: spin glasses”
June 8-13, 2009

HORAIRE / PROGRAM

Conférences :

salle 1355 (8, 10, 12 et 13 juin)

salle 1140 (9 et 11 juin)

Pauses-café et réception :

salle 1221

Lectures:

Room 1355 (June 8, 10, 12 & 13)

Room 1140 (June 9 & 11)

Coffee Breaks:

Room 1221

Le lundi 8 juin 2009 / *Monday, June 8, 2009*

08:30 - 09:00 Inscription et café croissants (1221) / *Registration and Coffee & Croissants (1221)*

09:00 - 09:15 Mots de bienvenue (1355) / *Welcoming addresses (1355)*

- *Ultrametricity I*

09:15 - 10:15 **Francesco Guerra** (Università di Roma “La Sapienza”)

“Ultrametricity in spin glasses and related systems”

10:15 - 10:45 Pause-café / *Coffee break*

(Salle / *Room* 1221)

10:45 - 11:45 **Dmitry Panchenko** (Texas A&M University)

“The Ghirlanda-Guerra identities and ultrametricity in the Sherrington-Kirkpatrick model”

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

- *Dynamics I*

14:00 - 15:00 **Jiri Cerny** (ETH-Zürich)

“Universality of the REM for the dynamics of mean-field spin glasses”

15:00 - 15:30 Pause-café / *Coffee break*

(Salle / *Room* 1221)

15:30 - 16:30 **Véronique Gayrard** (LATP)

“Aging in Bouchaud’s asymmetric trap model on the complete graph”

16:30 Réception de bienvenue (1221) / *Welcoming Reception (1221)*

Le mardi 9 juin 2009 / *Tuesday, June 9, 2009*

08:30 - 09:00 Café croissants (1221) / *Coffee & Croissants (1221)*

- *Hierarchical models*

09:00 - 10:00 **Nicola Kistler** (Universität Bonn)
“On a cavity field perturbation of the GREM”

10:00 - 10:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

10:30 - 11:30 **Silvio Franz** (Université Paris Sud)
“Hierarchical spin glasses”

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

- *Graphs*

14:00 - 15:00 **Andrea Montanari** (Stanford University)
“Statistical mechanics on general graphs”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

15:30 - 16:30 **Mariya V. Shcherbina** (Institute for Low Temperatures Ukr. Ac. Sci.)
“Central limit theorem for eigenvalue fluctuations of large random graphs”

16:30 - 17:30 **Amir Dembo** (Stanford University)
“Ising models and Bethe states on sparse random graphs”

Le mercredi 10 juin 2009 / *Wednesday, June 10, 2009*

08:30 - 09:00 Café croissants (1221) / *Coffee & Croissants (1221)*

- *Numerics I & Replicas*

09:00 - 10:00 **Jonathan Machta** (University of Massachusetts Amherst)
“Graphical Representations for Spin Glasses: Theoretical and Computational Considerations”

10:00 - 10:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

10:30 - 11:30 **Yan V. Fyodorov** (University of Nottingham)
“Multifractality, freezing, and replica symmetry breaking in random potentials with logarithmic correlations”

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

- *Numerics II*

14:00 - 15:00 **Enzo Marinari** (Universita di Roma 1)
“A local, low autocorrelation glassy model”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

15:30 - 16:30 **Peter A. Young** (UC Santa Cruz)
“Some recent numerical results concerning phase transitions in spin glasses”

16:30 - 17:30 **Cristian Giardinà** (Eindhoven University of Technology)
“Rigorous and numerical results for the Edwards-Anderson model”

Le jeudi 11 juin 2009 / *Thursday, June 11, 2009*

08:30 - 09:00 Café croissants (1221) / *Coffee & Croissants (1221)*

- *Beyond spin glasses I*

09:00 - 10:00 **Michael A. Moore** (University of Manchester)
"Glasses, jamming and spin glasses"

10:00 - 10:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

10:30 - 11:30 **Gerard Ben Arous** (New York University)
"Complexity of spin glasses and random matrices"

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

- *Ultrametricity II*

14:00 - 15:00 **Alexander Hartmann** (University of Oldenburg)
"Measuring ultrametricity and clustering properties of disordered systems"

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

15:30 - 16:30 **Pierluigi Contucci** (Universita di Bologna)
"New identities in spin glasses"

16:30 - 17:30 **Louis-Pierre Arguin** (New York University)
"The ROSt Perspective on Ultrametricity"

Le vendredi 12 juin 2009 / *Friday, June 12, 2009*

08:30 - 09:00 Café croissants (1221) / *Coffee & Croissants (1221)*

- *Beyond spin glasses II*

09:00 - 10:00 **Fabio Lucio Toninelli** (École Normale Supérieure de Lyon)
“Relevance of disorder for the pinning model in dimension $(1 + 1)$ ”

10:00 - 10:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

10:30 - 11:30 **Kay Kirkpatrick** (MIT)
“Dynamics in random fields of hard and soft spheres”

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

14:00 - 15:00 **Éric Brunet** (École Normale Supérieure)
“Statistics at the tip of a branching random walk”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / *Room* 1221)

15:30 - 16:30 **Jeremy Quastel** (University of Toronto)
“Effect of noise on traveling fronts”

Le samedi 13 juin 2009 / *Saturday, June 13, 2009*

08:30 - 09:00 Café croissants (1221) / *Coffee & Croissants (1221)*

09:00 - 10:00 Session de travail et courtes présentations / *Discussion session on open problems, and short informal presentations*

Le programme sera précisé au cours de la semaine.

The exact program will be decided during the week.

10:00 - 10:30 Pause-café / *Coffee break*

(Salle / *Room* 1221)

10:30 - 11:30 Session de travail et courtes présentations / *Discussion session on open problems, and short informal presentations*

Le programme sera précisé au cours de la semaine.

The exact program will be decided during the week.