

Centre de recherches mathématiques  
Université de Montréal

École d'été SMS 2012 "Combinatoire probabiliste"  
Du 25 juin au 6 juillet 2012

*SMS 2012 Summer School "Probabilistic Combinatorics"*  
*June 25 - July 6, 2012*

**HORAIRE / PROGRAM**

## Le lundi 25 juin 2012 / *Monday, June 25, 2012*

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

**09:00 - 10:30** **Alex Scott** (University of Oxford)  
*“Cliques, colourings and discrepancy - I”*

**10:30 - 11:00** Pause-café / *Coffee break*

**11:00 - 12:00** **Prasad Tetali** (Georgia Institute of Technology)  
*“Geometric and Functional Analysis on Discrete Spaces - I”*

**12:00 - 13:30** Pause-déjeuner / *Lunch break*

**13:30 - 15:00** **Peter Winkler** (Dartmouth College)  
*“Random walk and electrical networks”*

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

**15:30 - 16:30** **Perla Sousi** (University of Cambridge)  
*“Markov chain mixing times: bounds and asymptotics - I”*

**Le mardi 26 juin 2012 / *Tuesday, June 26, 2012***

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- 09:00 - 10:30** **Peter Winkler** (Dartmouth College)  
*“Cover time for vertices and for edges”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00** **Perla Sousi** (University of Cambridge)  
*“Markov chain mixing times: bounds and asymptotics - II”*
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 15:00** **Alex Scott** (University of Oxford)  
*“Cliques, colourings and discrepancy - II”*
- 15:00 - 15:30** Pause-café / *Coffee break*
- 15:30 - 16:30** **Prasad Tetali** (Georgia Institute of Technology)  
*“Geometric and Functional Analysis on Discrete Spaces - II”*
- 16:30**           Cocktail de bienvenue (6245) / *Welcoming reception (6245)*

**Le mercredi 27 juin 2012 / *Wednesday, June 27, 2012***

**09:00 - 10:30 Alex Scott** (University of Oxford)

*“Cliques, colourings and discrepancy - III”*

**10:30 - 11:00** Pause-café / *Coffee break*

**11:00 - 12:00 Prasad Tetali** (Georgia Institute of Technology)

*“Geometric and Functional Analysis on Discrete Spaces - III”*

**12:00 - 13:30** Pause-déjeuner / *Lunch break*

**13:30 - 15:00 Peter Winkler** (Dartmouth College)

*“Collision and avoidance”*

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

**15:30 - 16:30 Colin McDiarmid** (University of Oxford)

*“Colouring random graphs - I”*

## Le jeudi 28 juin 2012 / *Thursday, June 28, 2012*

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- 09:00 - 10:30 Yuval Peres** (Microsoft Research)  
*“Markov chain mixing times and related topics - I”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00 Colin McDiarmid** (University of Oxford)  
*“Colouring random graphs - II”*
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 15:00 Alex Scott** (University of Oxford)  
*“Cliques, colourings and discrepancy - IV”*
- 15:00 - 15:30** Pause-café / *Coffee break*
- 15:30 - 16:30 Perla Sousi** (University of Cambridge)  
*“Markov chain mixing times: bounds and asymptotics - III”*

**Le vendredi 29 juin 2012 / *Friday, June 29, 2012***

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- 09:00 - 10:30** **Alex Scott** (University of Oxford)  
*“Cliques, colourings and discrepancy - V”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00** **Colin McDiarmid** (University of Oxford)  
*“Colouring random graphs - III”*
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 15:00** **Peter Winkler** (Dartmouth College)  
*“Pursuit and evasion”*
- 15:00 - 15:30** Pause-café / *Coffee break*
- 15:30 - 17:00** **Yuval Peres** (Microsoft Research)  
*“Markov chain mixing times and related topics - II”*

**Le lundi 2 juillet 2012 / Monday, July 2, 2012**

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- 09:00 - 10:30** **Nikhil Bansal** (Eindhoven University)  
*“Low discrepancy colorings and semidefinite programming - I”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00** **Eric Vigoda** (Georgia Institute of Technology)  
*“Markov chains for graph colourings - I”*
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 15:00** **James R. Lee** (University of Washington)  
*“Cover times, Gaussian process and majorizing measures - I”*
- 15:00 - 15:30** Pause-café / *Coffee break*
- 15:30 - 17:00** **Peter Winkler** (Dartmouth College)  
*“Branching random walk”*

Le mardi 3 juillet 2012 / *Tuesday, July 3, 2012*

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- 09:00 - 10:30 James R. Lee** (University of Washington)  
*“Cover times, Gaussian process and majorizing measures - II”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00 Eric Vigoda** (Georgia Institute of Technology)  
*“Markov chains for graph colourings - II”*
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 15:00 Nikhil Bansal** (Eindhoven University)  
*“Low discrepancy colorings and semidefinite programming - II”*
- 15:00 - 15:30** Pause-café / *Coffee break*
- 15:30 - 16:30 Hamed Hatami** (McGill University)  
*“Influences and sharp thresholds - I”*



**Le mercredi 4 juillet 2012 / Wednesday, July 4, 2012**

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- 09:00 - 10:00** **Eric Vigoda** (Georgia Institute of Technology)  
*“Markov chains for graph colourings - III”*
- 10:00 - 11:00** **Penny Haxell** (University of Waterloo)  
*“A topology-free topological method - I”*
- 11:00 - 11:30** Pause-café / *Coffee break*
- 11:30 - 13:00** **Nikhil Bansal** (Eindhoven University)  
*“Low discrepancy colorings and semidefinite programming - III”*
- 13:00** Pause-déjeuner et après-midi libre / *Lunch Break and Free Afternoon*

## Le jeudi 5 juillet 2012 / *Thursday, July 5, 2012*

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- 09:00 - 10:30** **Nikhil Bansal** (Eindhoven University)  
*“Low discrepancy colorings and semidefinite programming - IV”*
- 10:30 - 11:00** Pause-café / *Coffee break*
- 11:00 - 12:00** **Penny Haxell** (University of Waterloo)  
*“A topology-free topological method - II”*
- 12:00 - 13:00** **Hamed Hatami** (McGill University)  
*“Influences and sharp thresholds - II”*

**Le vendredi 6 juillet 2012 / *Friday, July 6, 2012***

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**09:00 - 10:00 Hamed Hatami** (McGill University)

*“Influences and sharp thresholds - III”*

**10:00 - 11:00 Penny Haxell** (University of Waterloo)

*“A topology-free topological method - III”*

**11:00 - 11:30** Pause-café / *Coffee break*

**11:30 - 13:00 Nikhil Bansal** (Eindhoven University)

*“Low discrepancy colorings and semidefinite programming - V”*