

Centre de recherches mathématiques  
Université de Montréal

Atelier : Algèbres de Hopf combinatoires et polynômes de Macdonald  
Du 7 au 11 mai 2007

*Workshop: Combinatorial Hopf Algebras and Macdonald Polynomials*  
*May 7-11, 2007*

## **HORAIRE / PROGRAM**

Conférences : salle 1360

Pauses-café : salle 1221

*Lectures: Room 1360*

*Coffee Breaks: Room 1221*

## Le lundi 7 mai 2007 / *Monday, May 7, 2007*

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

09:30 - 10:30 **Adriano M. Garsia** (University of California, San Diego)

“À venir”

“TBA”

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

(Salle / *Room* 1221)

11:00 - 12:00 **Nicholas Loehr** (The College of William and Mary)

“Combinatorial Aspects of the Bergeron-Garsia Nabla Operator”

12:00 - 14:30 Déjeuner / *Lunch*

14:30 - 15:00 **Luc Lapointe** (Universidad de Talca)

“Towards a t-compatible affine insertion I”

15:00 - 15:30 **Jennifer Morse** (Drexel University)

“Towards a t-compatible affine insertion II”

15:30 - 16:00 Pause-café / *Coffee break*

(Salle / *Room* 1221)

16:00 - 17:00 **Jim Haglund** (University of Pennsylvania)

“An expansion of Macdonald’s  $Jmu$  into quasi-symmetric functions”

**Le mardi 8 mai 2007 / Tuesday, May 8, 2007**

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

**09:00 - 10:00** **Louis J. Billera** (Cornell University)  
“Quasisymmetric functions for Bruhat intervals and Kazhdan-Lusztig polynomials”

**10:00 - 10:30** **Gregory Saunders Warrington** (Wake Forest University)  
“Combinatorial aspects of  $\nabla(s_\lambda)$ ”

**10:30 - 11:00** Pause-café / *Coffee break*  
(Salle / *Room* 1221)

**11:00 - 12:00** **Alain Lascoux** (Université Marne-la-Vallée)  
“Gaudin functions of arbitrary level”

**12:00 - 14:30** Déjeuner / *Lunch*

**14:30 - 15:00** **Thomas Kyle Petersen** (University of Michigan)  
“Colored combinatorial Hopf algebras”

**15:00 - 15:30** **Sami Assaf** (University of California at Berkeley)  
“Dual equivalence graphs, ribbon tableaux and Macdonald polynomials”

**15:30 - 16:00** Pause-café / *Coffee break*  
(Salle / *Room* 1221)

**16:00 - 17:00** **Friedrich Knop** (Rutgers University)  
“Harmonic analysis on some super vector spaces”

Le mercredi 9 mai 2007 / *Wednesday, May 9, 2007*

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

09:00 - 09:30 **Florent Hivert** (University of Rouen)  
“Trees, functional equations and combinatorial Hopf algebras”

09:30 - 10:00 **Jean-Yves Thibon** (Université de Marne-la-Vallée)  
“Noncommutative symmetric Bessel functions”

10:00 - 10:30 **Pavlo Pylyavskyy** (MIT)  
“ $K$ -homology of Grassmanian and some new combinatorial Hopf algebras”

10:30 - 11:00 Pause-café / *Coffee break*  
(Salle / *Room* 1221)

11:00 - 12:00 **Frederic Patras** (Université de Nice Sophia-Antipolis)  
“Non commutative Spitzer identities”  
“*Identités de Spitzer non commutatives*”

12:00 - 14:30 Déjeuner / *Lunch*

14:30 - 15:30 **Thomas Lam** (Harvard University)  
“Affine Schubert Calculus”

15:30 - 16:00 Café et séance d’affichage / *Coffee and poster session*  
(Salle / *Room* 1221)

Le jeudi 10 mai 2007 / *Thursday, May 10, 2007*

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

09:00 - 10:00 **Mark Shimozono** (Virginia Tech)  
“Dual graded graphs arising from Combinatorial Hopf Algebras”

10:00 - 10:30 **Monica Vazirani** (UC Davis)  
“Affine tableaux and the double affine Hecke algebra”

10:30 - 11:00 Pause-café / *Coffee break*  
(Salle / *Room* 1221)

11:00 - 12:00 **Jeffrey Remmel** (University of California at San Diego)  
“The combinatorics of Macdonald’s  $D_n^1$  operator”

12:00 - 14:30 Déjeuner / *Lunch*

14:30 - 15:30 **Mercedes Helena Rosas / Rosa C. Orellana**  
“Kronecker polynomials I and II”

15:30 - 16:00 Pause-café / *Coffee break*  
(Salle / *Room* 1221)

16:00 - 17:00 **Iain Gordon** (The University of Edinburgh)  
“A little combinatorics around the rational Cherednik algebras”

**Le vendredi 11 mai 2007 / *Friday, May 11, 2007***

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

**09:00 - 09:00** **Cristian Lenart** (SUNY at Albany)  
 “Alcove paths, Hall-Littlewood polynomials, and a Hopf algebra”

**10:00 - 10:30** **Peter McNamara** (Bucknell University)  
 “A combinatorial classification of skew Schur functions”

**10:30 - 11:00** Pause-café / *Coffee break*  
 (Salle / *Room* 1221)

**11:00 - 12:00** **Jean-Christophe Novelli** (Marne-la-Vallée)  
 “0-Hecke algebras and Noncommutative Lagrange Inversion”

**12:00 - 14:30** Déjeuner / *Lunch*

**14:30 - 15:00** **Kevin Purbhoo** (The University of British Columbia)  
 “Tableaux, Puzzles, and Mosaics”

**15:00 - 16:00** **Anne Schilling** (UC Davis)  
 “Existence and combinatorial model for Kirillov-Reshetikhin crystals of type  $D_n^{(1)}, B_n^{(1)}, A_{2n-1}^{(2)}$ ”

**16:00 - 17:00** Café / *Coffee*  
 (Salle / *Room* 1221)