

Centre de recherches mathématiques
Université de Montréal

Atelier «Systèmes quantiques intégrables et modèles statistiques résolubles»
Du 30 juin au 5 juillet 2008

*Workshop “Integrable quantum systems and solvable statistical mechanical
models”*

June 30 - July 5, 2008

HORAIRE / PROGRAM

Conférences : salle 6214

Pauses-café : salle 6245

Lectures: Room 6214

Coffee Breaks: Room 6245

Le lundi 30 juin 2008 / *Monday, June 30, 2008*

08:30 - 09:00 Inscription (5345) et café-croissants (6245) / *Registration (5345) and Coffee & Croissants (6245)*

09:00 - 10:00 **Barry McCoy** (SUNY Stony Brook)
“Some mysteries of integrability: Q matrices, Correlations and Susceptibilities”

10:00 - 11:00 **Jean-Michel Maillet** (École Normale Supérieure de Lyon)
“Asymptotic behavior of integrable models correlation functions : Bethe ansatz approach”

11:00 - 11:30 Pause-café / *Coffee break*
(Salle / *Room* 6245)

11:30 - 12:30 **Jean-Sébastien Caux** (Universiteit van Amsterdam)
“Dynamics of Heisenberg chains: from the Bethe Ansatz to inelastic neutron scattering”

12:30 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 15:00 **Nikolai Kitanine** (Université de Cergy-Pontoise)
“Correlation functions of the open XXZ chain”

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

15:30 - 16:30 **Frank Göhmann** (Bergische Universitaet Wuppertal)
“Thermal correlators of the XXZ chain”

16:30 Cocktail / *Reception*
(Salle / *Room* 6245)

Le mardi 1 juillet 2008 / Tuesday, July 1, 2008

08:30 - 09:00 Café croissants (6245) / *Coffee & Croissants (6245)*

09:00 - 10:00 **Vladimir V. Bazhanov** (Australian National University)
“Quantum Geometry of 3-dimensional lattices”

10:00 - 11:00 **Fedor Smirnov** (Université Pierre et Marie Curie)
“Hidden fermionic structure in integrable models”

11:00 - 11:30 Pause-café / *Coffee break*
(Salle / Room 6245)

11:30 - 12:30 **Jörg Teschner** (DESY Theory)
“On the relation between quantum KdV and the Sinh-Gordon theories”

12:30 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 15:00 **Michio Jimbo** (The University of Tokyo)
“TBA”

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

15:30 - 16:30 **Robert Sims** (University of California at Davis)
“Lieb-Robinson Bounds and Their Applications”

16:30 - 17:30 Séance d’affichage / *Poster Session*
(Salle / Room 6245)

Le mercredi 2 juillet 2008 / Wednesday, July 2, 2008

08:30 - 09:30 Café croissants (6245) / *Coffee & Croissants (6245)*

09:00 - 10:00 **Vladimir E. Korepin** (SUNY Stony Brook)
“Open Problems in Bethe Ansatz”

10:00 - 11:00 **Paul Zinn-Justin** (Université Paris-Sud)
“Integrable loop models and combinatorics”

11:00 - 11:30 Pause-café / *Coffee break*
(Salle / Room 6245)

11:30 - 12:30 **Bruno Nachtergaele** (UC Davis)
“A Lieb-Schultz-Mattis Theorem in d Dimensions”

12:30 Après-midi libre / *Free afternoon*

Le jeudi 3 juillet 2008 / *Thursday, July 3, 2008*

08:30 - 09:00 Café croissants (6245) / *Coffee & Croissants (6245)*

09:00 - 10:00 **Francesco Mezzadri** (University of Bristol)
“Entanglement entropy in quantum spin chains with finite range interaction”

10:00 - 11:00 **Shannon Lee Starr** (University of Rochester)
“Ferromagnetic Ordering of Energy Levels”

11:00 - 11:30 Pause-café / *Coffee break*
(Salle / Room 6245)

11:30 - 12:30 **William Orrick** (Indiana University)
“Diagonal Ising correlation functions and quasimodular forms”

12:30 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 15:00 **Matthew B. Hastings** (Los Alamos National Laboratory)
“Time Dynamics in XXZ Spin Chains Far From Equilibrium”

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

15:30 - 16:00 **Boyka Aneva** (Bulgarian Academy of Sciences)
“Lattice many-body systems with a flow”

16:00 - 16:30 **Lea Santos** (Yeshiva University)
“Transport and Control of Integrable and Non-Integrable Low-Dimensional Spin-1/2 Systems”

16:30 - 17:00 **Karol Kozłowski** (ENS-Lyon)
“Asymptotic behavior of determinants of structured matrices”

17:00 - 17:30 **Alexandre Faribault** (Universiteit van Amsterdam)
“Bethe Ansatz approach to equilibrium and quench dynamics in the Richardson model”

Le vendredi 4 juillet 2008 / *Friday, July 4, 2008*

08:30 - 09:00 Café croissants (6245) / *Coffee & Croissants (6245)*

09:00 - 10:00 **Ian K. Affleck** (University of British Columbia)
“Beyond the Luttinger model: exact critical exponents for the XXZ spin chain at arbitrary wave-vector”

10:00 - 11:00 **Pierre Mathieu** (Université Laval)
“RSOS Paths, Quasi-particles and Fermionic Characters”

11:00 - 11:30 Pause-café / *Coffee break*
(Salle / *Room* 6245)

11:30 - 12:30 **Pavel Winternitz** (Université de Montréal)
“Superintegrability with and without separation of variables”

12:30 - 14:00 Pause-déjeuner / *Lunch break*

14:00 - 15:00 **Jun'ichi Shiraishi** (The University of Tokyo)
“TBA”

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

15:30 - 16:30 **Yvan Saint-Aubin** (Université de Montréal)
“Behavior of the two-dimensional Ising model at the boundary of a half-infinite cylinder ”

Le samedi 5 juillet 2008 / *Saturday, July 5, 2008*

08:30 - 09:00 Café croissants (6245) / *Coffee & Croissants (6245)*

09:00 - 10:00 **Pavel Bleher** (Indiana University-Purdue University Indianapolis)
“Exact solution of the six-vertex model with domain wall boundary conditions”

10:00 - 11:00 **John Harnad** (Université de Montréal & Concordia Univ.)
“Tau functions, random processes and equilibrium models of 1-D fermi gases”

11:00 - 11:30 Café / *Coffee*
(Salle / *Room* 6245)

11:30 Fin de l’atelier / *Closure of the workshop*