

Centre de recherches mathématiques
Université de Montréal

Atelier sur les systèmes quantiques à N corps
Du 28 mai au 1 juin 2012

Workshop on Quantum Many-Body Systems
May 28 - June 1, 2012

HORAIRE / PROGRAM

Conférences : salle 6214 (Pavillon André-Aisenstadt)

Pauses-café : salon Maurice-L'Abbé (salle 6245, Pavillon André-Aisenstadt)

Lectures: Room 6214 (Pavillon André-Aisenstadt)

Coffee Breaks: Salon Maurice-L'Abbé (Room 6245, Pavillon André-Aisenstadt)

Le lundi 28 mai 2012 / *Monday, May 28, 2012*

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- 09:00 - 09:30** Inscrition (salle 5345) et café-croissants (salle 6245)
Registration (Room 5345) and Coffee & Croissants (Room 6245)
- 09:30 - 10:30** **Elliott H. Lieb** (Princeton University)
“Topics in quantum entropy and entanglement”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / *Room* 6245)
- 11:00 - 12:00** **Heinz Siedentop** (Ludwig-Maximilians-Universität)
“The spectrum of graphene quantum dots”
- 12:00 - 14:00** Pause-déjeuner / *Lunch break*
- 14:00 - 15:00** **Vieri Mastropietro** (Università di Roma ”Tor Vergata”)
“Universal conductivity in graphene”
- 15:00 - 15:30** Pause-café / *Coffee break*
(Salle / *Room* 6245)
- 15:30 - 16:30** **Alessandro Giuliani** (Universita’ di Roma Tre)
“The scaling limit of the energy correlations in non integrable Ising models”
- 16:30** Réception de bienvenue (parrainé par l’American Institute of Physics - AIP)
(Salle / *Room* 6245)
Welcoming Reception (Sponsored by American Institute of Physics - AIP)

Le mardi 29 mai 2012 / *Tuesday, May 29, 2012*

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

09:30 - 10:30 **Mathieu Lewin** (Université de Cergy-Pontoise / Saint-Martin)
“Small polarons and their macroscopic limit towards Pekar’s polaron”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Jan Philip Solovej** (University of Copenhagen)
“The Scott correction in different models of atoms and molecules”

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

14:00 - 15:00 **Rupert L. Frank** (Princeton University)
“Properties of multi-polaron systems”

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

15:30 - 16:30 **Israel Michael Sigal** (University of Toronto)
“Bounds on photon speed and asymptotic completeness of Rayleigh scattering”

Le mercredi 30 mai 2012 / *Wednesday, May 30, 2012*

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

09:30 - 10:30 **Michael Aizenman** (Princeton University)
“TBA”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Simone Warzel** (Technische Universität München)
“TBA”

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

14:00 - 15:00 **Jakob Yngvason** (Universität Wien)
“*Interacting bosons in a random potential*”

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

15:30 - 16:30 **Victor Ivrii** (University of Toronto)
“*Asymptotics of the ground state energy and related topics for heavy atoms and molecules*”

18:30 Dîner - McGill Faculty Club, 3450 rue McTavish, Montréal
Conference Dinner - McGill Faculty Club, 3450 McTavish Street, Montréal

Le jeudi 31 mai 2012 / *Thursday, May 31, 2012*

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

09:30 - 10:30 **Bruno Nachtergaele** (UC Davis)
“On the classification of gapped ground state phases”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Robert Sims** (University of Arizona)
“Dynamical localization in disordered quantum spin systems”

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

14:00 - 15:00 **Israel Klich** (University of Virginia)
“TBA”

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

15:30 - 16:30 **Valentin Zagrebnov** (Université de la Méditerranée/Aix-Marseille II)
“Leaky photon cavity pumped by atomic beam”

Le vendredi 1 juin 2012 / *Friday, June 1, 2012*

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

09:30 - 10:30 **Jan Dereziński** (University of Warsaw)
“On the excitation spectrum of the Fermi gas”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Daniel Ueltschi** (University of Warwick)
“On the nature of correlations in quantum Heisenberg models”

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

14:00 - 15:00 **Edwin Langmann** (KTH, AlbaNova University Center)
“Correlated fermions and Luttinger-type models in higher dimensions”

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

15:30 - 16:30 **Christian Hainzl** (Universität Tübingen)
“Microscopic derivation of the Ginzburg-Landau theory”