

Centre de recherches mathématiques
Université de Montréal

Atelier sur la dynamique et théorie spectrale
Du 7 au 11 avril 2008

Workshop on Spectrum and Dynamics
April 7-11, 2008

HORAIRE / *PROGRAM*

Conférences : salle 6214
Pauses-café : salle 6245

Lectures: Room 6214
Coffee Breaks: Room 6245

Le lundi 7 avril 2008 / *Monday, April 7, 2008*

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- 08:45** Inscription (5345) et café-croissant (6245) / *Registration (5345) and Coffee & Croissant (6245)*
- 09:15 - 09:30** Mots de bienvenue / *Welcoming addresses*
- 09:30 - 10:15** **Roman Schubert** (University of Bristol)
“Minicourse : Mixing and waves: On the long time behaviour of wave propagation on manifolds of negative curvature”
- 10:15 - 10:45** Café et séance d’affichage / *Coffee and poster session*
 (Salle / Room 6245)
- 10:45 - 11:30** **Stéphane Nonnenmacher** (CEA-Saclay)
“Minicourse : Entropy of chaotic eigenmodes”
- 11:40 - 12:25** **Alexander Strohmaier** (Loughborough University)
“Spectral theory and frame flows on Kaehler manifolds”
- 12:30 - 14:00** Déjeuner (6245) / *Lunch (6245)*
- 12:30 - 14:00** Séance d’affichage (6245) / *Poster Session (6245)*
- 14:00 - 14:45** **Pavel Bachurin** (University of Toronto)
“Limiting distributions for a particle in a tube”
- 14:55 - 15:40** **Michael Levitin** (Cardiff University)
“Fourier transform, null variety, and Laplacian’s eigenvalues”
- 15:40 - 16:10** Café et séance d’affichage / *Coffee and poster session*
 (Salle / Room 6245)
- 16:10 - 16:55** **Gerhard Knieper** (Ruhr-Universität Bochum)
“A commutator formula and geodesic flows on manifolds of nonpositive curvature”

Le mardi 8 avril 2008 / *Tuesday, April 8, 2008*

08:45 - 09:30 Café croissants (6245) / *Coffee & Croissants (6245)*

09:30 - 10:15 **Roman Schubert** (University of Bristol)
*“Minicourse : Mixing and waves: On the long time
behaviour of wave propagation on manifolds of negative curvature”*

10:15 - 10:45 Café et séance d’affichage / *Coffee and poster session*
(Salle / Room 6245)

10:45 - 11:30 **Stéphane Nonnenmacher** (CEA-Saclay)
“Minicourse : Entropy of chaotic eigenmodes”

11:40 - 12:25 **Nalini Anantharaman** (École Polytechnique)
“About the spectrum of the damped wave equation”

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

12:30 - 14:00 Séance d’affichage (6245) / *Poster Session (6245)*

14:00 - 14:45 **Luc Hillairet** (Université de Nantes)
“Generic simplicity of polygons”

14:55 - 15:40 **Peter A. Perry** (University of Kentucky)
“The Miura Map, KdV, and Inverse Scattering”

15:40 - 16:10 Café et séance d’affichage / *Coffee and poster session*
(Salle / Room 6245)

16:10 - 16:55 **Yuri Safarov** (King’s College London)
“Average growth of the spectral function”

Le mercredi 9 avril 2008 / *Wednesday, April 9, 2008*

08:45 - 09:30 Café croissants (6245) / *Coffee & Croissants (6245)*

09:30 - 10:15 **Yuri A. Kordyukov** (Russian Academy of Sciences)
“Classical and quantum dynamics in transverse spectral geometry of foliations”

10:15 - 10:45 Pause-café / *Coffee break*
(Salle / Room 6245)

10:45 - 11:30 **Bernard Helffer** (Université Paris-Sud)
“Large On Nodal domains and spectral minimal partitions”

11:40 - 12:25 **Victor Ivrii** (University of Toronto)
“Spectral Asymptotics and Dynamics”

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

12:30 - 14:00 Séance d’affichage (6245) / *Poster Session (6245)*

14:00 - 14:45 **Michael Hitrik** (University of California at Los Angeles)
“The Kramers-Fokker-Planck Operator and Return to Equilibrium”

14:55 - 15:40 **Frédéric Faure** (Université Joseph Fourier)
“Semi-classical approach for hyperbolic dynamical systems and Ruelle resonances”

15:40 - 16:10 Pause-café / *Coffee break*
(Salle / Room 6245)

16:10 - 16:55 **Konstantin Khanin** (University of Toronto)
“Localization and pinning in systems with random potentials”

Le jeudi 10 avril 2008 / Thursday, April 10, 2008

08:45 - 09:30 Café croissants (6245) / *Coffee & Croissants (6245)*

09:30 - 10:15 **Ioannis Petridis** (University College London)
“On embedded eigenvalues for hyperbolic surfaces”

10:15 - 10:45 Pause-café / *Coffee break*
(Salle / Room 6245)

10:45 - 11:30 **John A. Toth** (McGill University)
“ L^2 -restriction bounds for eigenfunctions along curves in the quantum completely integrable case”

11:40 - 12:25 **Leonid Parnovski** (University College London)
“Spectral properties of periodic pseudo-differential operators”

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

12:30 - 14:00 Séance d’affichage (6245) / *Poster Session (6245)*

14:00 - 14:45 **Dmitry Dolgopyat** (University of Maryland)
“Stable ergodicity of random rotations”

14:55 - 15:40 **Lior Silberman** (Institute for Advanced Study)
“On the equivariant micro-local lift for locally symmetric spaces”

15:40 - 16:10 Pause-café / *Coffee break*
(Salle / Room 6245)

16:10 - 16:55 **Harold Donnelly** (Purdue University)
“Theta Lifts and Concentration Properties of Eigenfunctions”

Le vendredi 11 avril 2008 / *Friday, April 11, 2008*

08:45 - 09:30 Café croissants (6245) / *Coffee & Croissants (6245)*

09:30 - 10:15 **Mark Pollicott** (University of Warwick)
"Points of non-differentiability for boundary conjugacies between Fuchsian groups"

10:15 - 10:45 Pause-café / *Coffee break*
 (Salle / *Room* 6245)

10:45 - 11:30 **Richard Sharp** (University of Manchester)
"Manhattan curves and automorphisms of free groups"

11:40 - 12:25 **Dieter Mayer** (Technische Universität Clausthal)
"The transfer operator approach for Selberg's zeta function for Hecke triangle groups"

12:25 - 14:00 Pause déjeuner / *Lunch break*

14:00 - 14:45 **András Vasy** (Stanford University)
"Semiclassical second microlocal propagation of regularity and integrable systems"

14:55 - 15:40 **Yuri Netrusov** (University of Bristol)
"Remainder Estimates in the Weyl Formula for the Neumann Laplacian on a Class of Planar Domains"

15:40 - 16:00 Pause-café / *Coffee break*
 (Salle / *Room* 6245)

Session - Colloque CRM-ISM Colloquium

16:00 - 17:00 **Steve Zelditch** (Johns Hopkins University)
"Nodal lines of eigenfunctions, geodesics and complex analysis"

17:00 Cocktail (6245) / *Reception (6245)*

Le mardi 15 avril 2008 / *Tuesday, April 15, 2008*

13:00 - 14:00 Roman Schubert (University of Bristol)

*“Minicourse : Mixing and waves: On the long time
behaviour of wave propagation on manifolds of negative curvature”*

Le vendredi 18 avril 2008 / *Friday, April 18, 2008*

13:30 - 14:30 Stéphane Nonnenmacher (CEA-Saclay)

“Minicourse : Entropy of chaotic eigenmodes”