

Fifth Saint-Petersburg Conference in Spectral Theory
dedicated to the memory of M.Sh.Birman
Euler Institute, Saint-Petersburg, Russia

July 2-6, 2013

PRELIMINARY PROGRAMME

TUESDAY 2 July:

9:30–10:00: REGISTRATION

10:00–10:50: LEONID PASTUR (Institute for Low Temperatures, Kharkov)
On the Validity of the Gibbs Distribution for a Finite System Interacting with Random Matrix Reservoir

COFFEE BREAK

11:30–12:20: DMITRI YAFAEV (University of Rennes 1)
Convolutions and Hankel operators

LUNCH

14:30–15:20: PATRICK GERARD (University Paris-Sud)
The inverse spectral problem for self-adjoint compact Hankel operators

15:30–16:20: ALEXANDER SOBOLEV (University College London)
Multidimensional Wiener-Hopf operators and the entanglement entropy

COFFEE BREAK

16:50–17:40: BENJAMIN SCHLEIN (University of Bonn)
Many body quantum dynamics in the mean field regime

18:00 (TBC): BOAT TRIP

WEDNESDAY 3 July:

10:00–10:50: FEDOR SUKOCHEV (University of New South Wales)
Advances in modern noncommutative analysis

COFFEE BREAK

11:30–12:20: SERGEY NABOKO (University of Kent & St.Petersburg University)
On the detectable subspace of a non-selfadjoint operator

LUNCH

14:30–15:20: DENIS POTAPOV (University of New South Wales)
Frechet differentiability of S^p norms

15:30–16:20: KONSTANTIN MAKAROV (University of Missouri)
On the rotation of spectral subspaces

COFFEE BREAK

17:00–17:25: JAMES OLDFIELD (University College London)
A two-term Szegő theorem for generalized anti-Wick operators

17:30–17:55: NIKOLAJ VENIAMINOV (University of Paris–Dauphine)
Interacting fermions in a simple one-dimensional random model

18:00–18:25: MARCELLO SERI (University College London)
Resonances in the two centers Coulomb system

THURSDAY 4 July:

10:00–10:50: BORIS PAVLOV (NZ Institute of Advanced Study & St.Petersburg)
The dispersion functions of quasi-2D periodic Schrödinger lattices via Dirichlet-to-Neumann map

COFFEE BREAK

11:30–12:20: LEONID PARNOVSKI (University College London)
Multidimensional periodic and almost-periodic spectral problems

LUNCH

14:30–15:20: DENIS BORISOV (Bashkir State Pedagogical University, Ufa)
On gaps and Brillouin zones for periodic operators

15:30–15:55: VLADIMIR LOTOREICHIK (Graz University of Technology)
Self-adjoint Laplacians on partitions with δ - and δ' -couplings

16:00–16:25: FEDOR BAKHAREV (St. Petersburg University)
Spectral gaps in double periodic structures

COFFEE BREAK

17:00–17:25: SERGEY SIMONOV (Dublin Institute of Technology)
Kac theorem on spectral multiplicity for Schrödinger operator on star-shaped graph

17:35–18:00: ALEKSEY KOSTENKO (University of Vienna)
The HELP inequality and indefinite Sturm-Liouville spectral problems

FRIDAY 5 July:

10:00–10:50: MIKHAIL AGRANOVICH (High School of Economics, Moscow)
Elementary approach to fractional powers of strongly elliptic operators in Lipschitz domains

COFFEE BREAK

11:30–12:20: GRIGORI ROZENBLUM (Gothenburg)
On spectral properties of the Schrödinger operators on infinite combinatorial and quantum graphs

LUNCH

14:30–15:20: EVANS HARRELL (Georgia Tech)
Eigenvalue distributions and the structure of graphs

15:30–16:20: GEORGI RAIKOV (PUC, Chile)
Spectral and scattering properties of twisted waveguides

COFFEE BREAK

16:50–17:40: VLADIMIR KOZLOV (Linköping University)
On spectrum of an elastic solid with cusps

18:00–22:00 (TBC): CONFERENCE PARTY

SATURDAY 6 July:

10:00–10:50: VICTOR IVRII (University of Toronto)

Asymptotics of the ground state energy and related topics for heavy atoms and molecules: results: old, new, in progress and in perspective

COFFEE BREAK

11:30–12:20: GUNTER STOLZ (UAB Birmingham)

Localization properties of disordered quantum oscillator systems

LUNCH

14:30–15:20: ALEXANDER NAZAROV (POMI and St.Petersburg University)

The Tamarkin equiconvergence theorem and a first-order trace formula for regular differential operators revisited

15:30–16:20: ALEXANDER KOMECH (Vienna University)

On spectral resolution and eigenfunction expansions for Hamilton operators