

Second Saint-Petersburg Conference in Spectral Theory

dedicated to the memory of M.Sh.Birman
Euler Institute, Saint-Petersburg, Russia

July 12-16, 2010

PROGRAMME

MONDAY 12 July:

9:30–10:00: REGISTRATION

10:00–11:00: Rupert Frank *Critical Lieb-Thirring bounds in gaps*

COFFEE BREAK

11:30–12:30: Yulia Karpeshina *Quasi-intersections of an isoenergetic surface and complex angle variable*

LUNCH

14:30–15:30: Oleg Safronov *Absolutely continuous spectrum of multi-dimensional Schrödinger operators*

15:40–16:40: Roman Shterenberg *Complete asymptotic expansion of the integrated density of states of multidimensional almost-periodic Schrödinger operators*

COFFEE BREAK

17:00–18:00: Andrea Cianchi *Eigenvalue problems for the Laplacian on noncompact Riemannian manifolds*

TUESDAY 13 July:

10:00–11:00: Vladimir Buslaev *Scattering for the system of three one-dimensional Coulomb particles*

COFFEE BREAK

11:30–12:30: Boris Plamenevsky *On a method for computing waveguide scattering matrices*

LUNCH

14:30–15:30: Brian Davies *Resonances of quantum graphs*

15:40–16:40: Pavel Exner *Loops and trees: spectral and resonance properties of quantum graphs*

COFFEE BREAK

17:00–18:00: Alexey Pozharskii *Averaging in scattering problems*

WEDNESDAY 14 July:

10:00–11:00: Konstantin Makarov *On non-unitary representations of the generalized Weyl commutation relations*

COFFEE BREAK

11:30–12:30: Vladimir Peller *Functions of normal operators under perturbations*

LUNCH

YOUNG SCIENTISTS SESSION:

14:30–14:50: Ilya Kachkovskiy *Positive polynomials and mapping of pseudospectra*

14:55–15:15: Anna Kononova *On spectral perturbations of bounded Jacobi operators*

15:20–15:40: Fabian Portmann *Spectral inequalities for a class of non-elliptic operators*

COFFEE BREAK

16:10–16:30: Sergei Simonov *Zeros of the spectral density of the discrete Schrödinger operator with Wigner-von Neumann potential*

16:35–16:55: Asya Metelkina *Lyapunov exponent and integrated density of states for the slowly oscillating perturbations of the periodic Schrödinger operators.*

17:00–17:20: Maxim Demchenko *The dynamical inverse problem for the Maxwell system*

Valentin Strazdin *Matrix Schrödinger operator on the half-line: the differential equation with respect to the spectral parameter and an analog of Freud's equations*
17:30–17:50:

time and venue TBC:

BOAT TRIP

THURSDAY 15 July:

9:30–10:30: Leonid Pastur *On Links Between the Random Matrix and Random Operator Theories*

10:40–11:40: Alexander Fedotov *Behavior at infinity of solutions of almost periodic equations*

COFFEE BREAK

12:10–13:10: Francois Germinet *About currents, magnetic perturbations, magnetic barriers and magnetic guides in quantum Hall systems*

LUNCH

14:30–15:30: Frederic Klopp *Decorrelation estimates for the eigenlevels of random operators in the localized regime*

15:40–16:40: Gunter Stolz *Localization properties of the random displacement model*

COFFEE BREAK

17:00–18:00: Boris Vainberg *Negative spectrum of a perturbed Anderson Hamiltonian*

18:15: CONFERENCE DINNER

FRIDAY 16 July:

10:00–11:00: Michael Agranovich *General and spectral boundary value problems for strongly elliptic second-order systems in bounded Lipschitz domains.*

COFFEE BREAK

11:30–12:30: Michael Belishev *Wave spectrum of symmetric semi-bounded operator and its applications*

LUNCH

14:30–15:30: Timo Weidl *Trapped modes in elastic media for zero Poisson ratio*

15:40–16:40: Maria Esteban *Critical threshold for electronic stability under the action of an intense magnetic field*

COFFEE BREAK

17:00–18:00: Shinichi Kotani *KdV flow on the space of generalized reflectionless potentials*