

Conference programme

11th St. Petersburg Conference in Spectral Theory

21 – 24 June 2019

FRIDAY 21 June:

10:00–10:30: REGISTRATION

10:30–11:20: Richard Froese (University of British Columbia, Canada). *Resonances for one dimensional Stark Hamiltonians with weak electric field.*

COFFEE BREAK

11:50–12:40: Darren Ong (Xiamen University, Malaysia). *Sharp spectral transition for eigenvalues embedded into the spectral bands of perturbed periodic operators.*

12:40–13:10: Mark Dorodny (St. Petersburg State University, Russia). *Operator error estimates for homogenization of the nonstationary Schrödinger-type equations: dependence on time.*

LUNCH

15:10–16:00: Ilya Kachkovskiy (Michigan State University, USA). *Localization and delocalization for interacting 1D quasiperiodic particles.*

COFFEE BREAK

16:30–17:20: Alexander Fedotov (St. Petersburg State University, Russia). *Asymptotics of spectral gaps for the almost Mathieu equation with a small coupling constant.*

18:30 BOAT TRIP WITH WELCOME PARTY

SATURDAY 22 June:

10:00–10:50: Ira Herbst (University of Virginia, USA). *The Howland - Kato Commutator Problem.*

COFFEE BREAK

11:20–12:10: Vladimir Peller (Michigan State University, USA). *Trace formula for functions of pairs of non commuting self-adjoint operators.*

12:20–13:10: Konstantin Makarov (University of Missouri, USA). *The $\tan 2\Theta$ -theorem in fluid dynamics.*

LUNCH

15:10–16:00: Nikolay Kuznetsov (Institute for Problems in Mechanical Engineering, Russia). *Direct and inverse spectral problems for sloshing of a two-layer fluid in an open container.*

COFFEE BREAK

16:30–17:20: Grzegorz Świdorski (University of Wrocław, Poland). *Orthogonal polynomials with unbounded recurrence coefficients.*

17:20–17:50: Anna Tsvetkova (Moscow Institute of Science and Technology, Russia). *Uniform asymptotics of Hermite polynomials and associated Lagrangian manifolds.*

SUNDAY 23 June:

10:00–10:50: Werner Kirsch (University of Hagen, Germany). *Random Matrices with Exchangeable Entries*.

COFFEE BREAK

11:20–12:10: Sergei Nechaev (Interdisciplinary Scientific Center J.-V. Poncelet, Russia). *Ultrametricity and spectral statistics or random Schrodinger-like operators*.

12:10–13:00: Vladimir Nazaikinskii (Ishlinsky Institute for Problems in Mechanics of the Russian Academy of Sciences, Russia). *Partial Spectral Flow and the AharonovBohm Effect in Graphene*.

LUNCH

15:10–16:00: Sergey Dobrokhotov (Moscow Institute of Physics and Technology, Russia). *Asymptotics of eigenfunctions of the two-dimensional operator associated with billiards with semi-hard walls*.

COFFEE BREAK

16:30–17:20: Julie Rowlett (Chalmers University of Technology, Sweden). *Spectral asymptotics for rough Riemannian manifolds*.

18:00: CONFERENCE PARTY

MONDAY 24 June:

10:00–10:50: Marcel Griesemer (Stuttgart University, Germany). *Spectral Theory of the Fermi Polaron*.

COFFEE BREAK

11:20–11:50: Andreas Bitter (Stuttgart University, Germany). *On the virtual level of Schrödinger operators with applications to N -body systems*.

11:50–12:20: Simon Barth (Stuttgart University, Germany). *On the absence of the Efimov-effect for $N = 4$ particles*.

12:20–12:50: Alexander Poretsky (St. Petesburg State University, Russia). *Mathematical scattering theory in quantum waveguides*.

LUNCH

15:10–16:00: Alexey Kiselev (PDMI RAS, Russia). *A review of simple localized solutions of the wave equation*.