

10th Saint-Petersburg Conference in Spectral Theory
Euler Institute, Saint-Petersburg, Russia

June 9-12, 2018

CONFERENCE PROGRAMME

SATURDAY 9 June:

9:30–10:00: REGISTRATION

10:00–10:50: Frédéric Klopp (Sorbonne Université, Paris). *Resonances for large random samples.*

COFFEE BREAK

11:20–12:10: Georgi Rajkov (Pontifical Catholic University of Chile). *Lifshits tails for randomly twisted quantum waveguides.*

12:20–13:10: Tatiana Suslina (St. Petersburg State University, Russia). *Homogenization of the stationary Maxwell system with periodic coefficients.*

LUNCH

15:10–16:00: Nikolay Filonov (PDMI RAS, Russia). *On the uniqueness of the Leray-Hopf solution for a dyadic model.*

COFFEE BREAK

16:30–17:20: Sergei Nazarov (St. Petersburg State University and Institute of Mechanical Engineering Problems, Russia). *Sharpening and smoothing near-threshold Wood anomalies in cylindrical waveguides.*

18:30 BOAT TRIP WITH WELCOME PARTY

SUNDAY 10 June:

10:00–10:50: Alexander Its (Indiana University Purdue University Indianapolis, USA). *The Riemann-Hilbert approach to the determinants of Toeplitz + Hankel matrices.*

COFFEE BREAK

11:20–12:10: Alexander Aptekarev (Keldysh Institute of Applied Mathematics, Russia). *Jacobi matrices on trees and multiple orthogonal polynomials.*

12:20–13:10: Andrei Martínez Filkenstein (Universidad de Almería, Spain). *Asymptotics of multiple orthogonal polynomials for cubic weight.*

LUNCH

15:10–16:00: Boris Mityagin (Ohio State University, USA). *“Arcsine law” for eigenfunctions of anharmonic operators.*

COFFEE BREAK

16:30–17:20: Roman Bessonov (St. Petersburg State University and PDMI RAS, Russia). *Szegő condition and scattering for one-dimensional Dirac operators.*

MONDAY 11 June:

10:00–10:50: Jan Philip Solovej (University of Copenhagen, Denmark). *Spectral flow and zero modes for Dirac operators with magnetic links.*

COFFEE BREAK

11:20–12:10: Alexander Grigorian (Bielefeld University, Germany). *Heat kernels on manifolds with ends.*

12:20–12:50: Yulia Meshkova (Chebyshev Laboratory, St. Petersburg State University, Russia). *Homogenization of hyperbolic equations with periodic coefficients.*

12:50–13:20: Bernhard Pfirsich (University College London, UK). *A Szegő limit theorem for translation-invariant operators on polygons.*

LUNCH

15:10–15:40: Orif Ibrogimov (University College London, UK). *On the spectrum of the spin-boson Hamiltonian with two photons.*

15:40–16:10: Egor Galkovski (St. Petersburg State University, Russia). *A generalization of the trace formula for differential operators on a segment with the lowest-order coefficient perturbed by finite signed measure.*

COFFEE BREAK

16:40–17:10: Matteo Capoferri (University College London, UK). *Global hyperbolic propagators in curved space.*

17:10–17:40: Maria Platonova (Steklov Institute, St. Petersburg, Russia). *On branching random walks.*

18:00: CONFERENCE DINNER

TUESDAY 12 June:

10:00–10:50: Hermann Schulz-Baldes (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany). *The spectral localizer for even index pairings.*

COFFEE BREAK

11:20–12:10: Andrew Shkalikov (Moscow State University, Russia). *Eigenvalue Dynamics for PT -Symmetric Sturm-Liouville Operators with Physical Parameter. Solvable Models and Applications.*

12:20–13:10: Aleksey Kostenko (Universität Wien, Austria, and University of Ljubljana, Slovenia). *Infinite Quantum Graphs.*

LUNCH

15:10–16:00: Victor Ivrii (University of Toronto, Canada). *Spectral asymptotics for Steklov's problem in domains with edges.*