

Conference
Semi-Classical And Geometric Asymptotics In Mathematical Physics
<http://sites.univ-tln.fr/prc-russie/>

Amphi FA010, Bât. Pi, Campus de Toulon

Day 1 (Tuesday, April 24)

08:30 – 09:00 Welcome to participants

Chair : S.Dobrokhotov

09:00 – 09:40 A. A.Fedotov (St. Petersburg State University)
On minimal solutions of difference equations with periodic coefficients

09:45 – 10:05 E. V. Shchetka (St. Petersburg State University)
Monodromy matrices for Harper equation

10:10 – 10:30 A. Grigis (University Paris-Nord)
Excited resonance widths for Helmholtz resonators with straight neck

Coffee break

Chair : V. Nazaikinski

11:00 – 11:20 T. Ourmières-Bonafos (University Paris-Sud)
Dirichlet spectrum of conical layers

11:25 – 11:45 M. Khalile (University Paris-Sud)
Laplacians with Robin boundary conditions in 2D domains with corners

11:50 – 12:10 L. A. Chernozatonskii (Emmanuel Institute of Biochemical Physics, Moscow)
Wave packet scattering of Dirac and Schrödinger particles on potential barriers in graphene nanostructures

12:15 – 12:35 K. Reijnders (Radboud University, Nijmegen)
Caustics in graphene construction of a uniform semiclassical approximation and comparison with tight binding results

Lunch

Chair : L. Chernozatonskii

14:00 – 14:20 D. G. Kvashnin (Emmanuel Institute of Biochemical Physics & MISIS, Moscow)
Wave packet dynamics and electronic properties of novel perforated bilayered graphene

14:25 – 14:45 D. S. Minenkov (Institute for Problems in Mechanics, Moscow)
Semiclassical asymptotics and the density of states in graphene under STM tip

14:50 – 15:10 I. Bogaevski (Moscow State University)
Arnold's interior scattering in graphene

15:15 – 15:35 L. Cossetti (Roma)
Schrödinger operators with complex potentials : transition from spectra to pseudospectra

Coffee break

Chair : A. Grigis

16:05 – 16:25 K. Pankrashkin (University Paris-Sud)
Dirac operators with Lorentz scalar shell interactions

16:30 – 16:50 M. Hartig (CPT, Toulon)
Long range Van der Waals- London interaction in pseudo-relativistic molecules

16:55 – 17:15 M. Oppio (Trento)
Quantum theory in real and quaternionic Hilbert space : How the complex Hilbert space

structure emerges from Poincaré symmetry

Conference
Semi-Classical And Geometric Asymptotics In Mathematical Physics
<http://sites.univ-tln.fr/prc-russie/>

Amphi FA010, Bât. Pi, Campus de Toulon

Day 2 (Wednesday, April 25)

Chair : *A.Fedotov*

09:00 – F. Klopp (UPMC IMJ-PRG)

09:40 *Resonances for large samples of random media*

09:45 – H. Ueberschar (UPMC IMJ-PRG)

10:05 *Intermediate eigenvalue statistics*

10:10 – S. Yu. Dobrokhotov (Institute for problems

10:30 in mechanics & MIPT, Moscow)

New integral representation for the Maslov canonical operator and applications

Coffee break

Chair: *K. Rijnders*

11:00 – V. E. Nazaykinskii (Institute for problems in

11:20 mechanics)

Asymptotics of problems with localized functions on the right-hand side and in the boundary data

11:25 – A. Yu. Anikin (Institute for problems in

11:45 mechanics)

Semi-classical asymptotics for operators with non-trivial subprincipal symbols and application to graphene equation

11:50 – P. Petrov (V. I. Il'ichev Pacific Oceanological

12:10 Institute, Vladivostok)

Whispering gallery waves in shallow geoacoustic waveguides

12:15 – T. Suslina (St. Petersburg State University)

12:35 *Homogenization of the stationary Maxwell system with periodic coefficients*

Lunch

Chair : *S. Shlosman*

14:00 – A. Panati (CPT, Toulon)

14:20 *Heat fluctuations in the two-time measurement framework and ultraviolet regularity*

14:25 – S. de Nigris (INRIA, Lyon)

14:45 *Graph spectral characterization of the XY model of complex networks*

Closing

