Participants of OTAMP2004

Organizers

(1) **Jan Janas**
Institute of Mathematics PAN, Poland
Branch in Cracow, Sw.Tomasz 30, 31-027, Cracow, Pland
najanas@cyf-kr.edu.pl

(2) **Pavel Kurasov**
Dept. of Mathematics, Lund Institute of Technology
Dept of Mathematics, LTH, Solvegatan 18, Box 118, 221 00 Lund, Sweden
kurasov@maths.lth.se

(3) **Ari Laptev**
Royal Institute of Technology in Stockholm, Sweden
Department of Mathematics, Royal Institute of Technology, 100 44 Stockholm, Sweden
laptev@math.kth.se

(4) **Sergey Naboko**
St.Petersburg State University, Russia
Department of Mathematical Physics, Institute of Physics, NIIF, St.Petersburg State University, ul.Ulianovskaya, 1, St.Petergoff, St.PETERSBURG, Russia, 198904
naboko@math.su.se

(5) **Gunter Stolz**
University of Alabama at Birmingham, USA
Department of Mathematics, CH 542, University of Alabama at Birmingham, 1300 University Blvd, Birmingham, AL 35294-1170, USA
stolz@math.uab.edu

Invited speakers

(1) **Vadim Adamyan**
Odessa National University, Ukraine
I.I. Mechnikov Odessa National University, 65026 Odessa, Ukraine
vadamyan@paco.net
Perturbation theory for a class of close selfadjoint extensions

(2) **Walter van Assche**
Katholieke Universiteit Leuven, Belgium

Department of Mathematics Katholieke Universiteit Leuven Celestijnenlaan 200 B B-3001 Leuven Belgium
walter@wis.kuleuven.ac.be
Orthogonal polynomials with discrete spectrum and converging recurrence coefficients

(3) **Yurij Berezansky**
Institute of Mathematics of NASU, Professor, Academician of NASU, Ukraine
Institute of Mathematics of NASU, 3 Tereshchenkivs'ka Str., 01601 Kyiv, Ukraine
berezan@mathber.carrier.kiev.ua
Spectral theory of commutative Jacobi fields and its some applications

(4) **Serguei Denissov**
California Institute of Technology
Mathematics 253-37, Caltech, Pasadena, CA, 91125, USA
denissov@caltech.edu
On new developments in the spectral analysis of the Schrödinger and Dirac operators

(5) **Pavel Exner**
Nuclear Physics Institute, Czech Academy of Sciences
Department of Theoretical Physics, Nuclear Physics Institute, Academy of Sciences, 25068 Rez/Prague, Czechia
exner@ujf.cas.cz
Vertex coupling approximations in quantum graphs

(6) **Ira Herbst**
University of Virginia, Charlottesville, USA
Department of Mathematics P. O. Box 400137 University of Virginia Charlottesville, VA 22904-4137 USA
iwh@virginia.edu
Absence of quantum states corresponding to unstable classical channels

(7) **Frederic Klopp**
Universite Paris-Nord, France
LAGA UMR 7539, Institut Galilee, Av. JB Clement, 93430, Villetaneuse, France
klopp@math.univ-paris13.fr
Adiabatic quasi-periodic Schrödinger operators. Interactions between spectral bands

(8) **Heinz Langer**
TU Vienna, Austria

Institute of Analysis and Scientific Computing, Wiedner Hauptstrasse 8-10, A-1040 Wien, Austria
hlanger@mail.zserv.tuwien.ac.at
The generalized Schur algorithm and inverse spectral problems

(9) **Marco Marletta**
Cardiff University, United Kingdom
School of Mathematics, Cardiff University, PO Box 926, Cardiff CF24 4YH, United Kingdom
Marco.Marletta@cs.cardiff.ac.uk
Approximation of DN maps and spectra of Schrödinger operators on exterior domains

(10) **Robert Minlos**
Institute for Information Transmission Problems (Russian Academy of Science), Moscow, Russia
Dobrushin Mathematical Laboratory, Institute for Information Transmission Problems (Russian Academy of Science), Karetnyj pereulok, 19, Moscow, 101447 Russia
minl@iitp.ru
Two-particle bounded states of transfer-matrix for Gibbsian fields (high temperature regime)

(11) **Boris Pavlov**
Dept. of Mathematics, University of Auckland, New Zealand
Dept. of Mathematics, University of Auckland, Private Bag 92019, Auckland, New Zealand
pavlov@math.auckland.ac.nz
Transport properties of quantum networks

(12) **Alexander Pushnitski**
Loughborough University, U.K.
Department of Mathematical Sciences, Loughborough University, Loughborough, LE11 2NL, United Kingdom
a.b.pushnitski@lboro.ac.uk
Trace formulae and high energy spectral asymptotics for the Landau Hamiltonian

(13) **Oleg Safronov**
University Alabama, Birmingham USA and KTH, Stockholm Sweden
Mathematical Department, UAB, 1300 University Boulevard, Birmingham, AL35294 USA
oleg@math.uab.edu
Absolutely continuous spectrum of multi-dimensioal Shrödinger operators with slowly decaying potentials

(14) **Jeffrey Schenker**
ETH, Switzerland
Theoretische Physik ETH Zurich CH-8093 Zurich Switzerland
jschenker@itp.phys.ethz.ch
Spectral Theory of Time Dispersive and Dissipative Systems

(15) **Andrei Shkalikov**
Moscow Lomonosov State University, Russia
Department of Mechanics and Mathematics, Moscow Lomonosov State University, Moscow, Vorob'evi Gori, 119899, Russia
ashkalikov@yahoo.com
Limit spectral portraits for non-selfadjoint problems with small parameter

(16) **Peter Stollmann**
Faculty of Maths, TU Chemnitz, Germany
Faculty of Maths, TU Chemnitz, 09107 Chemnitz, Germany
p.stollmann@mathematik.tu-chemnitz.de
Generic singular continuous spectrum for geometric disorder

(17) **Ryszard Szwarc**
University of Wroclaw, Poland
Institute of Mathematics University of Wroclaw pl. Grunwaldzki 2/4 50-384 Wroclaw, Poland
szwarc@math.uni.wroc.pl
Estimates for Jacobi matrices and chain sequences

Participants

(1) **Andrei Borisovich**
Gdansk University, Poland
Institute of Mathematics, University of Gdansk, ul. Wita Stwosza 57, 80-952 Gdansk, POLAND
andbor@math.univ.gda.pl
Fredholm operators and bifurcations in Plateau problem

(2) **Piotr Budzyński**
Institute of Mathematics, Jagiellonian University, Poland
Jagiellonian University, Department of Mathematics and Informatics, Institute of Mathematics, Reymonta 4, 30-059, Krakow, Poland
piotr_budzynski@o2.pl

(3) **Laura Cattaneo**
Institute for Applied Mathematics, University of Bonn, Germany
Institute for Applied Mathematics, Probability and Statistics

Division, Wegelerstrasse 6, D-53115 Bonn, Germany
cattaneo@wiener.iam.uni-bonn.de
Mourre's inequality and embedded bound states

(4) **Dariusz Cichon**
Uniwersytet Jagiellonski, Instytut Matematyki, Poland
Instytut matematyki UJ. Reymonta 4, 30059 Krakow, Poland
cichon@im.uj.edu.pl
Selfadjointness of non-Jacobi infinite matrices

(5) **Petru Cojuhari**
AGH University of Science and Technology, Department of Applied Mathematics, Poland
Department of Applied Mathematics, AGH Unieversity of Science and Technology, Al. Mickiewicza 30, 30-059 Cracow, Poland
cojuhari@uci.agh.edu.pl
Spectral Analysis of Dirac Operators

(6) **Monique Combescure**
CNRS France
IPNL, bat Paul Dirac 4 rue Enrico Fermi F-69622 VILLEURBANNE FRANCE
mcombe@ipnl.in2p3.fr
Around the semiclassical behavior of "Quantum Fidelity"

(7) **Horia Cornean**
Aalborg Universitet, Danmark
Institut for Matematiske Fag, Aalborg Universitet Fredrik Bajers Vej 7G 9220 Aalborg, Danmark
cornean@math.auc.dk
One dimensional models of excitons in carbon nanotubes

(8) **Gisele Ducati**
Federal University of Parana, Brazil
Departmento of Mathematics PO Box 19081 Curitiba (PR) - Brazil 81531-970
ducati@mat.ufpr.br
Quaternionic potentials in non relativistic quantum mechanics

(9) **Rupert Frank**
Royal Institute of Technology Stockholm, Sweden
Royal Institute of Technology, Department of Mathematics, Lindstedtsvaegen 25, 10044 Stockholm, Sweden
rupert@math.kth.se
On the Laplacian on the halfplane with a periodic boundary condition

(10) **Vladimir Geyler**
Mordovian State University, Russia
Department of Mathematics Mordovian State University 430000 Saransk, Russia
geyler@mrsu.ru
Selberg zeta-function and geometric scattering on compact manifolds

(11) **Leonid Golinskii**
Institute for Low Temperature Physics and Engineering, Ukraine
Mathematics Division, Institute for Low Temperature Physics and Engineering, 47 Lenin ave., 61103, Kharkov, Ukraine
golinskii@ilt.kharkov.ua
Discrete spectrum of complex Jacobi matrices and Pavlov's theorems

(12) **Rostyslav Hryniv**
Institut fur Angewandte Mathematik, Bonn (Germany)
Abt. fur Stochastik Institut fur Angewandte Mathematik Universitt Bonn Wegelerstr. 6 D-53115 Bonn Germany
rhryniv@wiener.iam.uni-bonn.de, rhryniv@iapmm.lviv.ua
Inverse spectral problems for Sturm-Liouville operators in impedance form

(13) **Wataru Ichinose**
Shinshu University, Japan
Department of Mathmatical Sciences, Shinshu University, Asahi 3-1-1, 390-8621, Matsumoto, Japan
ichinose@math.shinshu-u.ac.jp
A mathematical theory of the Phase space Feynman path integral of the functional

(14) **Aref Jeribi**
Faculty of Sciences in Sfax Tunisia
Departement de Mathematiques Faculte des sciences de Sfax Route de Soukra Km 3.5 B.P. 802 3018 Sfax Tunisie
Aref.Jeribi@fss.rnu.tn

(15) **Witold Karwowski**
Institute of Physics, Zielona Gora University, Poland
Witold Karwowski ul. Gajowicka 100 m.3 53 407 Wroclaw, Poland
witoldkarwowski@go2.pl

(16) **Amir Khosravi**
University for Teacher Education of IRAN

Faculty of Mathematical Sciences and Computer Engineering, University For Teacher Education, 599 Taleghani Ave., Tehran, 15618, IRAN
khosravi_amir@yahoo.com
C^*_ρ -algebras and functional calculus homomorphism

(17) **Alexander V. Kiselev**
Dublin Institute of Technology, Ireland
School of Mathematical Sciences Dublin Institute of Technology DIT Kevin Street Dublin 8 IRELAND
alexander.kiselev@dit.ie
Weak annihilators for non-self-adjoint operators with almost Hermitian spectrum

(18) **Kamila Kliś**
Akademia Rolnicza, Krakow, Poland
Zakład Zastosowań Matematyki, Akademia Rolnicza, Al. Mickiewicza 24/28, 30-059 Krakow
rmklis@cyf-kr.edu.pl

(19) **Sylwia Kondej**
Institute of Physics, University of Zielona Gora, Poland
University of Zielona Gora, Institute of Physics, ul. Szafrana 4a, 65246 Zielona Gora, Poland
kondej@ift.uni.wroc.pl
Schrödinger operators with singular perturbations: a resonance model

(20) **Evgeni Korotyaev**
Humboldt -Univ. Germany
Humboldt-Universitt zu Berlin Math. Institute Rudower Chaussee 25 Johann von Neumann-Haus (I.313) 10099 Berlin
ek@mathematik.hu-berlin.de
Inverse problem for the discrete 1D Schrödinger operator with periodic potential

(21) **Volodymyr Koshmanenko**
Professor, Institute of Mathematics, Ukraine
Department of Mathematical Physics, Institute of Mathematics, Tereshchenkivska str. 3, 01601 Kyiv, Ukraine
kosh@imath.kiev.ua
On singular perturbations given by Jacobi matrices

(22) **Alexander Kozhevnikov**
University of Haifa, Israel
Department of Mathematics, University of Haifa, Haifa, 31905,

Israel
kogevn@math.haifa.ac.il
On isomorphism of elliptic operators

(23) **Stanislav Kupin**
University of Provence, France
CMI, UMR 6632 University of Provence 39, rue Joliot-Curie 13453 Marseille Cedex 13 France
kupin@cmi.univ-mrs.fr
Non-Szegö asymptotics for orthogonal polynomials on the unit circle

(24) **Annemarie Luger**
Vienna University of Technology, Austria
Department of Analysis and Scientific Computing, Wiedner Hauptstrasse 8-10, A-1040 Wien, Austria
aluger@mail.zserv.tuwien.ac.at
Reflectionless point interaction

(25) **Witold Majdak**
The University of Mining and Metallurgy in Krakow, The Faculty of Applied Mathematics, Poland
The University of Mining and Metallurgy, The Faculty of Applied Mathematics, al. Mickiewicza 30, 30-059, Krakow, Poland
majdak@wms.mat.agh.edu.pl (or: majdak@autograf.pl)

(26) **Maria Malejki**
Faculty of Applied Mathematics, AGH University of Science and Technology, Poland
Faculty of Applied Mathematics, AGH University of Science and Technology, al. Mickiewicza 30, 30-059 Krakow, Poland
malejki@uci.agh.edu.pl

(27) **Federico Menendez-Conde**
Universidad Autonoma de Hidalgo, Mexico
Centro de Investigacion en Matematicas Instituto de Ciencias Besicas e Ingeniera (ICBI) Carr. Pachuca-Tulancingo Km 4.5 Mineral de la Reforma, Hidalgo CP 42181
fmclara@uaeh.reduaeh.mx

(28) **Bernd Metzger**
Fakultät für Mathematik, TU Chemnitz
Technische Universität Chemnitz Fakultät für Mathematik 09107 Chemnitz
b.metzger@mathematik.tu-chemnitz.de

The Parabolic Anderson Model: The asymptotics of the statistical moments, Lifshitz tails and related topics

(29) **Boris Mityagin**
the Ohio State University, Columbus, USA
Department of Mathematics 231 West 18th Ave Columbus, OH 43210 the U.S.A.
mityagin.1@osu.edu
Simple and double eigenvalues of the Hill operator with a two term potential

(30) **Wojciech Młocek**
Akademia Rolnicza w Krakowie
Zakład Zastosowań Matematyki, al. Mickiewicza 24, 30-059 Krakow
mlocek@ar.krakow.pl
tel: (012) 662 40 20

(31) **Marcin Moszynski**
Instytut Matematyki Stosowanej i Mechaniki, Wydział Matematyki Informatyki i Mechaniki, Uniwersytet Warszawski
Uniwersytet Warszawski, Wydział Matematyki Informatyki i Mechaniki, Instytut Matematyki Stosowanej i Mechaniki, ul. Banacha 2, 02-097, Warszawa, Poland
mmoszyns@mimuw.edu.pl
1. On some unbounded tridiagonal matrices generating C_0 semigroups in l^p spaces

(32) **Yaroslav Mykytyuk**
Lviv National University, Ukraine
Department of mechanics and mathematics, Lviv National University, 1, Universytetska st., 79000, Lviv, Ukraine
yamykytyuk@yahoo.com
An Inverse Scattering Problem for Sturm-Liouville Operators on Semiaxis

(33) **Hatem Najar**
I.P.E.I.Monastir Tunisia
Departement de mathematiques I.P.E.I.Monastir. 5000 Monastir Tunisie
hatem.najar@ipeim.rnu.tn

(34) **Marlena Nowaczyk**
Matematik LTH, Sweden
Matematikcentrum LTH Box 118 221 00 Lund, Seden

marlena@maths.lth.se
Inverse Scattering Problem for Quantum Graphs

(35) **Konstantin Pankrashkin**
Institute of Mathematics, Humboldt-University of Berlin, Germany
Institute of Mathematics Humboldt-University of Berlin Rudower Chaussee 25 12489 Berlin Germany
const@mathematik.hu-berlin.de
Point perturbations as pseudopotentials

(36) **Artem Pulemotov**
Kyiv National T. Shevchenko Univ., Ukraine
Department of Mathematics and Mechanics, Kyiv National T. Shevchenko Univ., 64 Volodymyrska str., 01033 Kyiv, Ukraine
pulen@i.kiev.ua
Subfields of a Jacobi Field

(37) **Roman Romanov**
Cardiff University, UK, and St. Petersburg State University, Russia
School of Computer Science Cardiff University, Cardiff Queen's Buildings, PO Box 916 Newport Road, Cardiff CF24 3XF UK
r.v.romanov@cs.cf.ac.uk
The instability of the absolutely continuous spectrum of nonself-adjoint ordinary differential operators under slowly decaying perturbations

(38) **Hermann Schulz-Baldes**
TU Berlin, Germany
Institut fuer Mathematik Strasse des 17. Juni 136 D-10623 Berlin, Germany
schuba@math.tu-berlin.de
Weak disorder expansion for localization lengths of quasi-1D systems

(39) **Roman Shterenberg**
St.Petersburg State University, Russia
Department of Mathematical Physics, Physical Faculty, St.Petersburg State University, ul. Ul'yanovskaya 1, 198504 St.Petersburg, Petrodvorets, RUSSIA
roman@rs3759.spb.edu
Periodic magnetic Schrödinger operator with degenerate lower edge of the spectrum

(40) **Luis Silva**
Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas (IIMAS) Universidad Nacional Autonoma de Mexico

Mexico
Depto. de Metodos Matematicos y Numericos IIMAS-UNAM
Apdo. postal 20-726 01000 Mexico, D.F.
silva@leibniz.iimas.unam.mx
Absence of accumulating points in the pure point spectrum of Jacobi matrices

(41) **Gerald Teschl**
University of Vienna, Austria
Department of Mathematics, University of Vienna, Nordbergstr. 15, A1090 Vienna, Austria
gerald.teschl@univie.ac.at
Scattering theory for Jacobi operators with quasi-periodic background

(42) **Alessandro Teta**
Dipartimento di Matematica Pura e Applicata Universita di L'Aquila Italy
Dipartimento di Matematica Pura e Applicata Universita di L'Aquila via Vetoio - Loc. Coppito 67100 L'Aquila Italy
teta@univaq.it
Analysis of decoherence in two-particle system

(43) **Alexey Tikhonov**
Taurida National University, Ukraine
28 Kirov str., apt. 61 Simferopol, 95011 Crimea Ukraine
tikhonov@club.cris.net
Functional model for operators with spectrum on a curve and its applications

(44) **Francoise Truc**
Institut Fourier, France
Institut Fourier, Laboratoire de Mathematiques, BP 74, 38402 St Martin d'Heres Cedex , France
trucfr@ujf-grenoble.fr
Remarks on the spectrum of the Neumann problem with magnetic field in the half space

(45) **Tomio Umeda**
Himeji Institute of Technology Japan
Department of Mathematics Himeji Institute of Technology Shosha, Himeji 671-2201 Japan
umeda@sci.himeji-tech.ac.jp

(46) **Peter Yuditskii**
Johannes Kepler University of Linz, Austria

Institute for Analysis, Johannes Kepler University of Linz, A-4040 Linz, Austria
Petro.Yudytskiy@jku.at
On generalized sum rules for Jacobi matrices

(47) **Boris N. Zakhariev**
Joint Institute for Nuclear Research
Laboratory of theoretical Physics, JINR, Dubna, 141980, Russia
zakharev@thsun1.jinr.ru
New results in control of discrete, continuous abd band spectra of Shrödinger equation

(48) **Grigory Zhislin**
Doctor of phys. and math.sciences, professor (main scientist of Radiophysical Research Institute) full professor of Nizhny Novgorod State University, Russia
Division of mathem.physics of Radiophysical Research Institut (NIRFI), 25 Bolshaya Pecherskaya str. 603950, Nizhny Novgorod, Russia
greg@nirfi.sci-nnov.ru
Spectral properties of pseudorelativistic hamiltonians of atoms and positive ions with nuclei of infinite masses

(49) **Lech Zielinski**
Universite du Littoral, FRANCE
Centre Universitaire de la Mi-Voix, Laboratoire de Math. Pures et Appliques, Universite du Littoral, 50 rue F. Buisson B.P. 699, 62228 Calais, FRANCE
Lech.Zielinski@lmpa.univ-littoral.fr
On Semiclassical Spectral Asymptotics for Elliptic Operators with Critical Points

(50) **Andrej Zlatos**
University of Wisconsin-Madison
Mathematics Department University of Wisconsin-Madison 480 Lincoln Dr. Madison, WI 53706 USA
andrej@math.wisc.edu
Sum Rules for Jacobi Matrices and Divergent Lieb-Thirring Sums