

Programme AMP 2024

The times indicated in the programme are in Mexico City time (UTC- 6h)

1. 05.08

- 8:45 am

Dr. Ramsés Mena Chávez. Director IIMAS-UNAM, Mexico

Inauguration

- 9:00-10:00 Fritz Gesztesy

Continuity properties of the spectral shift function for massless Dirac operators and an application to the Witten index

- 10:00-10:15 Intermission

- 10:15-11:15

Pavel Kurasov

Maximal dissipative operators on metric graphs: hypergraphs and multiplicities

2. 06.08

- 9:00-10:00 am Pavel Exner

Schrödinger operators with channel-type potentials

- 10:00-10:15 Intermission

- 10:15-11:15 Ricardo Weder

The Bernstein-Landau paradox in fusion plasmas. An operator theory point of view

- 11:15-11:30 Intermission

- 11:30-12:30
Gregory Berkolaiko
Morse theory for eigenvalues of self-adjoint families

3. 07.08

- 9:00-10:00 am Vjacheslav Yurko
Method of spectral mappings in the inverse problem theory
- 10:00-10:15 Intermission
- 10:15-11:15 Christiane Tretter
TBA

4. 08.08

- 9:00-10:00 am Jan Dereziński
Propagators on curved spacetimes
- 10:00-10:15 Intermission
- 10:15-11:15 Vladislav Kravchenko
Analytic representations for solutions in inverse coefficient problems
- 11:15-11:30 Intermission
- 11:30-12:30 Sergei Avdonin
Inverse problems for the Schrödinger operator on metric graphs

5. 09.08

- 09.00-10:00 am Evgeny Korotyaev
Schrödinger operators on periodic discrete and metric graphs
- 10:00-10:15 Intermission
- 10:15-11:15 Julien Ricaud
Nonlinear Dirac equation with Soler-type nonlinearity

6. 10:08

- 09:00-10:00 am Mikhail Ignatiev
Direct and inverse scattering for differential systems with singularity
- 10:00-10:15 Intermission
- 10:15-11:15 Ramazan Ercan
The direct and inverse scattering problems for the first-order linear discrete system associated with the derivative NLS system
- 11:15-11:30 Intermission
- 11:30-12:30 Abdon Choque-Rivero
The matrix Toda equation

7. 12:08

- 9:00-10:00 am Bruno Després
Scattering structure of linearized Vlasov-Poisson equations
- 10:00-10:15 Intermission
- 10:15-11:15 Tuncay Aktosun
Soliton solutions to a system of nonlinear evolution equations associated with a third-order ordinary linear differential equation

8. 13:08

- 09:00- 10:00 am Natalia Bondarenko
Inverse problems for the fourth-order differential operators
- 10:0-10:15 Intermission
- 10:15-11:15 Olaf Post
Different variants of generalized operator norm convergence
- 11:15-11:30 Intermission
- 11:30-12:30 Jussi Behrndt
Spectral shift functions and Dirichlet-to-Neumann maps

9. 14.08

- 09:00-10:00 am Sergey Buterin

On damping a control system of arbitrary order with global aftereffect on a temporal tree

- 10:00-10:15 Intermission

- 10:15-11:15 Victor Rykhlov

On multiple completeness of root functions of certain classes of ordinary differential pencils of operators

10. 15.08

- 09.00-10.00 am Maria Kuznetsova

On inverse problems for operators with frozen arguments

- 10:00-10:15 Intermission

- 10:15-11:15

Vassilis Papanicolaou

Discrete and continuous non-self-adjoint Hill operators whose spectrum is a real interval

- 11:15-11:30 Intermission

- 11:30-12:30

Mostafa Sabri

Ergodic Theorems for Continuous-time Quantum Walks on Crystal Lattices and the Torus

11. 16.08

- 09:00-10:00 am Wencai Liu

Algebraic geometry, complex analysis and combinatorics in spectral theory of periodic graph operators

- 10:00-10:15 Intermission

- 10:15-11:15

Delio Mugnolo

The heat kernel on metric graphs and its geometric significance

12. 17.08

- 09:00-10:00 am Mehmet Unlu

The Marchenko method for the general system of derivative nonlinear Schrödinger equations