Spectral Theory and Weyl Functions

Mathematisches Forschungsinstitut Oberwolfach, 4.-10.1.2015

Programme

Monday, January 5
9:30-10:30 H. Langer, *Transition functions of Sturm-Liouville problems*

11:00-11:30 K. Pankrashkin, *Reflections on Herglotz functions, Hill's operator, metric graphs and self-adjoint extensions*
11:30-12:00 C. Trunk, *Eigenvalue estimates for operators with finitely many negative squares*

16:00-16:30 A.F.M. ter Elst, *Analysis of the Dirichlet-to-Neumann operator on nonsmooth domains*
16:30-17:00 H. Neidhardt, *Boundary triplets and trace formulas*
17:00-17:30 S. Hassi, *Some classes of Weyl functions of abstract boundary mappings*

Tuesday, January 6
9:30-10:30 W. Arendt, *Does diffusion determine the domain ?*

11:00-11:30 P. Exner, *Strong coupling in leaky graphs and Robin billiards*
11:30-12:00 V. Derkach, *Partially fundamentally reducible operators in Krein spaces*

16:00-16:30 M.M. Malamud, *Uniqueness results for systems of ordinary differential equations and Hamiltonian systems*
16:30-17:00 I. Wood, *Spectral information contained in Dirichlet-to-Neumann type maps*
17:00-17:30 C. Fulton, *The connection problem for solutions of Sturm-Liouville problems with two singular endpoints, and its relation to Titchmarsh-Weyl m-functions*

Wednesday, January 7
9:30-10:30 M.A. Kaashoek, *Dirac systems with rational data: explicit formulas and related nonlinear equations*

11:00-11:30 K.M. Schmidt, *On spectral measures of one-dimensional Dirac operators*
11:30-12:00 S. Bögli, *Remarks on the convergence of pseudospectra*

Thursday, January 8
9:30-10:30 F. Gesztesy, *Titchmarsh Weyl m-functions and (ordinary) differential operators*

11:00-11:30 R. Hempel, *L_1-estimates for eigenfunctions of the Dirichlet Laplacian*
11:30-12:00 G. Grubb, *Spectral results for mixed problems and fractional order elliptic operators*

16:00-16:30 M. Marletta, *The finite section method for dissipative Schrödinger & Jacobi operators*
16:30-17:00 G. Teschl, *Dispersion estimates for one-dimensional Schrödinger and Klein-Gordon equations*
17:00-17:30 V. Huang, *Gradient growth and blowup in equations of fluid dynamics*

Friday, January 9
9:30-10:30 J. Partington, *Linear systems, transfer functions and operator theory*

11:00-11:30 O. Staffans, *The state/signal resolvent functions*
11:30-12:00 H. Zwart, *Accretive closure relations for impedance passive systems nodes*

16:00-16:30 A. Kostenko, *An isopectral problem for the conservative Camassa-Holm flow*
16:30-17:00 J. Eckhardt, *The inverse spectral problem for indefinite strings*
17:00-17:30 T. Dohnal, *Numerical Evans function method for spectral stability of solitary waves in periodic media*