

Analytic and algebraic methods in physics VII

March 17 - 18, 2011, Villa Lanna, Prague

THE PROGRAMME

the final update: March 19, 2011

Wednesday, March 16, 2011 ARRIVALS	
Thursday, March 17, 2011	
9.00 - 18.00	TALKS (with break for lunch) details: see below
Friday, March 18, 2011	
9.00 - 18.00	TALKS (with break for lunch) details: see below
Saturday, March 19, 2011 DEPARTURES	

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(the first day)

Thursday, March 17, 2011	
9.00 - 9.05	OPENING
session I. (<i>effect algebras</i>) chair: I. Rotter	
9.05 - 9.35	Zdenka Riečanová (Bratislava) <i>"Operator Effect Algebras in Hilbert Spaces"</i>
9.40 - 10.10	Jan Paseka (Brno) <i>"PT-Symmetry in (generalized) effect algebras"</i>
10.15 - 10.40	Martin Kalina (Bratislava) <i>"On centers of atomic Archimedean effect algebras"</i>
10.45 - 11.05	coffee break
session II. (<i>complexified mechanics</i>) chair: H. F. Jones	
11.05 - 11.35	Daniel W. Hook (London) <i>"Tunnelling in classical mechanics"</i>
11.40 - 12.10	Eva-Maria Graefe (London) <i>"Wave packet evolution in non-Hermitian quantum systems"</i>
12.15 - 12.45	Dorje Brody (London) <i>"On complexified mechanics and quaternions"</i>
12.50 - 14.00	LUNCH

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12.50 - 14.00	LUNCH
session III. (<i>exceptional points</i>) chair: M. H. Lee	
14.00 - 14.35	Boris Shapiro (Stockholm) <i>"Heine-Stieltjes theory, exact and asymptotic results"</i>
14.40 - 15.10	Günter Wunner (Stuttgart) <i>"Exceptional points for nonlinear Schrödinger equations describing Bose-Einstein condensates"</i>
15.15 - 15.50	Ingrid Rotter (Dresden) <i>"Phase rigidity in many-level quantum systems"</i>
15.55 - 16.20	coffee break
session IV. (<i>PT symmetry</i>) chair: R. J. Rivers	
16.20 - 16.50	Andreas Fring (London) <i>"PT-symmetry breaking in complex nonlinear wave equations and their deformations"</i>
16.55 - 17.30	Hugh F. Jones (London) <i>"Theoretical Aspects of Diffraction from PT-symmetric Periodic Optical Lattices"</i>
17.35 - 17.55	Monique Smith (London) <i>"New solutions for antilinear deformations of Coxeter groups with applications to Calogero models"</i>
18.00	THE END OF THE FIRST DAY

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Friday, March 18, 2011	
9.00 - 9.05	announcements
session V. (<i>algebraic methods</i>) chair: M. Kibler	
9.05 - 9.40	Robin Hudson (Loughborough) <i>"Quantum central limit theorems and invariance principles, quantum Levy area and random matrices"</i>
9.45 - 10.15	Vladimir V. Kisil (Leeds) <i>"Representations of the Heisenberg group and all sorts of mechanics"</i>
10.20 - 10.50	coffee break

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10.20 - 10.50	coffee break
session VI. (<i>minischool</i>) chair: A. Fring	
10.50 - 11.10	M Howard Lee (Athens) <i>"Cyclic solutions in chaos, Sharkovskii's theorem and isomorphism"</i>
11.15 - 11.35	Gabriela Malenová (Řež) <i>"Asymptotic behaviour of the heat equation in twisted waveguides"</i>
11.40 - 12.00	Helena Šediváková (Řež) <i>"Effective Hamiltonian in curved quantum waveguides as a consequence of norm resolvent convergence"</i>
12.00 - 12.20	Jakub Železný (Řež) <i>"Formula for a general metric operator and for the C operator in a simple PT-symmetric model"</i>
12.25 - 12.45	Radek Novák (Prague) <i>"The Pauli equation with non-Hermitian PT-symmetric boundary conditions"</i>
12.50 - 14.00	LUNCH

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12.50 - 14.00	LUNCH
session VII. (<i>quantum physics</i>) chair: R. Hudson	
14.00 - 14.35	Paulo Goncalves de Assis (Canterbury) <i>"PT-symmetry and integrable models"</i>
14.40 - 15.15	Vít Jakubský (Řež) <i>"Klein tunneling and supersymmetry in graphene"</i>
15.20 - 15.55	Jiří Lipovský (Řež) <i>"Resonance asymptotics for quantum graphs in magnetic field"</i>
16.00 - 16.30	coffee break
session VIII. (<i>analytic methods</i>) chair: B. Shapiro	
16.30 - 17.05	Ray Rivers (London) <i>"Path integrals for classical and quantum physics"</i>
17.10 - 17.45	Per Alexandersson (Stockholm) <i>"On Eigenvalues of the Schroedinger operator with a complex-valued polynomial potential"</i>
17.50 - 18.00	POSTRE SESSION org.: M. Kibler
18.00	THE END OF THE MEETING