

**The 10th international microconference
Analytic and algebraic methods in physics**

June 4 - 7, 2012, Villa Lanna, Prague

→ **programme** ←
the final version

Monday, June 4th, 2012	
14:00	OPENING
14:00 - 18:00	TALKS
Tuesday, June 5th, 2012	
9:30 - 12:30 and 14:00 - 19:00	TALKS
Wednesday, June 6th, 2012	
9:30 - 12:30 and 14:00 - 17:30	TALKS
Thursday, June 7th, 2012	
9:30 - 12:30	TALKS
12:30	CLOSURE

THE LIST OF TALKS

June 4th: Monday

Afternoon programme

14:00	OPENING
session I: PT symmetry chair: Hugh F. Jones	
14:00 - 14:35	Eva-Maria Graefe (London) <i>Breakdown of adiabatic transfer properties in a three level system with decay</i>
14:40 - 15:15	Dorje Brody (Uxbridge) <i>PT symmetry, indefinite metric, and nonlinear quantum mechanics</i>
15:20 - 15:55	Uwe Günther (Dresden) <i>Nonlinear PT-symmetric plaquettes</i>
16:00 - 16:05	coffee break
session II: pseudo-Hermiticity chair: Ingrid Rotter	
16:05 - 16:40	Ali Mostafazadeh (Istanbul) <i>Ghost-Free Quantization of the Pais-Uhlenbeck Oscillator, Self-Dual Spectral Singularities, and PT-Symmetry</i>
16:45 - 17:20	Miloslav Znojil (Řež) <i>Non-Hermitian star-shaped quantum graphs</i>
17:25 - 18:00	Amine B. Hammou (Oran) <i>Generalized continuity equation for quasi Hermitian Hamiltonians</i>
18:00	THE END OF THE FIRST DAY

THE LIST OF TALKS

June 5th: Tuesday

morning programme	
session III: quantum chaos chair: Peter G. L. Leach	
9:30 - 10:05	M. Howard Lee (Athens) <i>Making repulsive fixed points attractive: A reforming method</i>
10:10 - 10:45	Pavel Cejnar (Prague) <i>Quantum phase transitions in finite algebraic systems</i>
10:50 - 11:10	coffee break
session IV: open systems chair: M. Howard Lee	
11:10 - 11:45	Ingrid Rotter (Dresden) <i>Avoided level crossings in open quantum systems</i>
11:50 - 12:25	Teoman Turgut (Istanbul) <i>Condensation of bosons with contact interaction (on manifolds)</i>
12:30 - 14:00	LUNCH

LIST OF TALKS

Afternoon programme

session V: PT symmetry chair: Ali Mostafazadeh	
14:00 - 14:35	Hugh F. Jones (London) <i>WKB for PT-symmetric Sturm-Liouville Problems</i>
14:40 - 15:15	Andreas Fring (London) <i>PT-symmetric noncommutative spaces with minimal length and momentum uncertainty relations</i>
15:20 - 15:55	Radek Novák (Řež) <i>Pauli equation with complex boundary conditions</i>
16:00 - 16:15	coffee break
session VI: manybody quantum systems chair: Andreas Fring	
16:15 - 16:50	Holger Cartarius (Stuttgart) <i>Bose-Einstein condensate in a PT symmetric double well</i>
16:55 - 17:30	Matěj Tušek (Prague) <i>A New Estimate on the Two-Dimensional Indirect Coulomb Energy</i>
17:35 - 17:40	a break
session VII: graphs and manifolds chair: Dorje Brody	
17:40 - 18:15	Ladislav Hlavatý (Prague) <i>Poisson-Lie plurality</i>
18:20 - 18:55	Miloš Tater (Řež) <i>On the spectrum of a bent chain graph</i>
19:00	THE END OF THE SECOND DAY

THE LIST OF TALKS

June 6th: Wednesday

morning programme	
session VIII: effect algebras chair: Takuya Mine	
9:30 - 10:05	Zdenka Riečanová (Bratislava) <i>Effect algebras of positive linear operators densely defined in Hilbert spaces</i>
10:10 - 10:45	Jan Paseka (Brno) <i>Realization of generalized effect algebras</i>
10:50 - 11:10	coffee break
session IX: supersymmetry chair: Uwe Günther	
11:10 - 11:45	Petr Jizba (Prague and Berlin) <i>Emergent SUSY as a signature of classicality</i>
11:50 - 12:25	Vít Jakubský (Řež) <i>On the supersymmetry of Dirac operators</i>
12:30 - 14:00	LUNCH

Afternoon programme

session X: symmetries chair: Eva-Maria Graefe	
14:00 - 14:35	Peter G. L. Leach (Durban) <i>Emmy Noether and Linear Evolution Equations</i>
14:40 - 15:15	Petr Novotný (Prague) <i>Graded contractions of representations of Lie algebras</i>
15:20 - 15:55	Frieder Kleefeld (Fürth & Lisboa) <i>Complex covariance</i>
16:00 - 16:15	coffee break
session XI: groups chair: Teoman Turgut	
16:15 - 16:50	Jiří Hrivnák (Prague) <i>Discretization of new Weyl group orbit functions</i>
16:55 - 17:30	Jiří Janda (Brno) <i>Intervals on weakly ordered partial commutative groups of linear operators</i>
17:30	THE END OF THE THIRD DAY

THE LIST OF TALKS

June 7th: Thursday

morning programme	
session XII: Schrödinger operators chair: Sergey Kuzhel	
9:30 - 10:05	Takuya Mine (Kyoto) <i>Explicit eigenfunctions for the Schrödinger operators with two-solenoidal Aharonov-Bohm fields</i>
10:10 - 10:45	Diana Barseghyan (Řež) <i>Spectral analysis of Schrödinger operators with unusual semiclassical behaviour</i>
10:50 - 11:10	coffee break
session XIII: operator theory chair: Zdenka Riečanová	
11:10 - 11:45	Sergey Kuzhel (Cracow) <i>On scattering theory for PT-symmetric operators</i>
11:50 - 12:25	David Krejčířík (Řež) <i>On the similarity of Sturm-Liouville operators with non-Hermitian boundary conditions to self-adjoint and normal operators</i>
12:30	CLOSING
12:30 - 14:00	LUNCH