

**The 16th international conference
Analytic and algebraic methods in physics**

September 10 - 13, 2019, Trojanova street 13, lecture hall 301

→ **programme** ←

as of September 11, 2019

talks of 25 minutes plus 5 minutes for discussion

September 10th, Tuesday, the first day starts in the afternoon

13:00 - 14:25	registrations
14:20 - 14:30	OPENING
chair: Vít Jakubský	
14:30 - 15:00	Ali Mostafazadeh (Istanbul) <i>Exactness of the Born Approximation and Broadband Unidirectional Invisibility</i>
15:00 - 15:30	Joshua Feinberg (Haifa) <i>Quasi-Hermitian Random Matrices: Theory and Applications</i>
15:30 - 16:00	Mauricio Pato (São Paulo) <i>Some properties of real and complex eigenvalues of pseudo-Hermitian random matrices</i>
16:00 - 16:30	coffee break
chair: Uwe Guenther	
16:30 - 17:00	Alexander Turbiner (Mexico City) <i>Quantum many-body problem: (Lie)-algebraic aspects</i>
17:00 - 17:30	Juan Carlos Lopez Vieyra (Mexico City) <i>Choreography on Lemniscate: polynomial integrals of motion, superintegrability</i>
17:30 - 18:00	Jiří Hrivnak (Prague) <i>Graphene dots via discretizations of Weyl-orbit functions</i>
18:00	THE END OF THE FIRST DAY

September 11th: Wednesday, morning programme

chair: Ali Mostafazadeh	
9:00 - 9:30	Fabio Bagarello (Palermo) <i>Some recent results on non self-adjoint Hamiltonians</i>
9:30 - 10:00	Miloslav Znojil (Řež) <i>Hiddenly Hermitian quantum models: The concept of perturbations</i>
10:00 - 10:30	Cemile Nur (Yalova) <i>On the estimates of the periodic eigenvalues for some special potentials</i>
10:30 - 11:00	coffee break
chair: Fabio Bagarello	
11:00 - 11:30	Manuel Gadella (Valladolid) <i>Ladder operators for resonances and antibound states for hyperbolic Pöschl-Teller and hyperbolic step potentials.</i>
11:30 - 12:00	Haydar Uncu (Aydin) <i>One-Dimensional Spinless Salpeter Hamiltonian with Multiple Dirac Delta Potentials</i>
12:00 - 12:30	Fatih Erman (Izmir) <i>The Splitting in the Bound State Energy for Some Singular Interactions Through a Perturbation Theory</i>
12:30 - 14:30	LUNCHTIME

September 11th: Wednesday, afternoon programme

chair: Francisco Correa	
14:30 - 15:00	Rafael Tiedra de Aldecoa (Santiago de Chile) <i>Spectral and scattering theory of one-dimensional coupled photonic crystals</i>
15:00 - 15:30	Biagio Cassano (Bari) <i>Self-adjoint extensions of the two-valley Dirac Operator with discontinuous infinite mass boundary conditions</i>
15:30 - 16:00	Tereza Kurimaiová (Prague) <i>Spectral properties of the damped wave equation</i>
16:00 - 16:30	coffee break
chair: Rafael Tiedra de Aldecoa	
16:30 - 17:00	Alexander Moroz (Berlin) <i>Localization dynamics in multi-dimensional networks</i>
17:00 - 17:30	Anna Muranova (Bielefeld) <i>Effective impedance as a rational function</i>
17:30 - 18:00	Leslaw Rachwał (Prague) <i>Infrared fixed points in quantum conformal Weyl gravity</i>
18:00	THE END OF THE SECOND DAY

September 12th: Thursday, morning programme

chair: Joshua Feinberg	
9:00 - 9:30	Alfredo Iorio (Prague) <i>The hep-th zoo on Dirac materials</i>
9:30 - 10:00	Alfredo Raya (Morelia) <i>Coherent states in Strained 2D Dirac materials</i>
10:00 - 10:30	Özlem Yeşiltaş (Gazi) <i>$N = 2$ Supersymmetric Quantum Mechanics Algebra And Cosmic Strings</i>
10:30 - 11:00	coffee break
chair: Alfredo Iorio	
11:00 - 11:30	Artur Ishkhaynyan (Ashtarak) <i>Exact solutions of the sextic oscillator from the bi-confluent Heun equation</i>
11:30 - 12:00	Francisco Correa (Valdivia) <i>Complex and non-local solitons, integrability and quantum systems</i>
12:00 - 12:30	Satoshi Ohya (Tokyo) <i>Potential Algebra Approach to Quantum Mechanics with Generalized Uncertainty Principle</i>
12:30 - 14:30	LUNCHTIME

September 12th: Thursday, afternoon programme

chair: Alexander Turbiner	
14:30 - 15:00	Andrei Shafarevich (Moscow) <i>Lagrangian manifolds and quantization rules, corresponding to semi-classical eigenvalues of the Schroedinger equation on a surface with conic singularity</i>
15:00 - 15:30	Yahia Saadi (Batna) <i>Detection of gravitational waves via quantum effects</i>
15:30 - 16:00	Anna Allilueva (Moscow) <i>Conic Lagrangian surfaces and localized solutions of equations of relativistic gas dynamics</i>
16:00 - 16:30	coffee break
chair: Artur Ishkhanyan	
16:30 - 17:00	Libor Šnobl (Prague) <i>Superintegrability and time-dependent integrals</i>
17:00 - 17:30	Antonella Marchesiello (Prague) <i>Superintegrability and separability in a magnetic field</i>
17:30 - 18:00	Alexander Turbiner (Mexico City) <i>Choreography in 3D Newtonian gravity</i>

September 13th: Friday, morning programme

chair: Manuel Gadella	
9:00 - 9:30	Usha Kulshreshtha (Delhi) <i>Charged Compact Boson Stars</i>
9:30 - 10:00	Petr Ambrož (Prague) <i>Description of Voronoi tiles in quasicrystals with octagonal symmetry</i>
10:00 - 10:30	Daya Shankar Kulshreshtha (Delhi) <i>On the Quantization of the Light-Front String Theory</i>
10:30 - 11:00	coffee break
chair: Vladimir Lotoreichik	
11:00 - 11:30	Juraj Boháčik (Bratislava) <i>Time dependent propagator for an-harmonic oscillator with quartic potential</i>
11:30 - 12:00	Michal Tichý (Prague) <i>Invariant solutions of reaction-diffusion equations on evolving domains</i>
12:30 - 12:40	CLOSING
12:40	THE END OF THE CONFERENCE