

The 14th international conference
Analytic and algebraic methods in physics

September 11 - 14, 2017, Trojanova street 13, lecture hall 301

→ **programme** ←

as of July 13, 2017

(preliminary)

P. T. O.

September 11th: Monday

Afternoon programme

14:00 - 14:30	last minute registrations
14:30 - 14:35	OPENING
session I: PT symmetry 1 chair: t. b. a.	
14:35 - 15:05	Oktay Veliev (Istanbul) <i>Schrodinger operator with the periodic PT-symmetric potentials</i>
15:10 - 15:40	Daniel Hook (London & St. Louis) <i>Behavior of eigenvalues in a region of broken PT symmetry</i>
15:45 - 16:15	coffee break
session II: mathematical physics 1 chair: t. b. a.	
16:15 - 16:45	Sergii Kuzhel (Cracow) <i>t. b. a. (30+5 min.)</i>
16:50 - 17:20	Andrei Shafarevich (Moscow) <i>Laplacians and wave equations on polyhedral surfaces</i>
17:25 - 17:55	Ray Rivers (London) <i>The Simple Harmonic Oscillator</i>
18:00	THE END OF THE FIRST DAY

September 12th: Tuesday

Morning programme

session III: open quantum systems 1 chair: t. b. a.	
9:30 - 10:00	Holger Cartarius (Stuttgart) <i>Open many-body quantum systems with topologically nontrivial phases</i>
10:05 - 10:35	Yogesh N. Joglekar (Indianapolis) <i>t. b. a. (30+5 min.)</i>
10:40 - 11:10	coffee break
session IV: mathematical physics 2 chair: t.b.a.	
11:10 - 11:50	Teoman Turgut (Istanbul) <i>Uniqueness of the ground state for Lee model</i>
11:55 - 12:25	Fabio Rinaldi (Rome) <i>Gaussian potential is essentially solvable</i>
12:30 - 14:00	LUNCHTIME

September 12th: Tuesday

Afternoon programme

session V: quantization techniques chair: t. b. a.	
14:00 - 14:30	Fabio Bagarello (Palermo) <i>kq-representation for non-Hermitian position and momentum operators, and bi-coherent states</i>
14:35 - 15:05	Daya Shankar Kulshreshtha (Delhi) <i>The Instant-Form versus Light-Front Quantization of Field Theories and String Theories</i>
15:10 - 15:40	Usha Kulshreshtha (Delhi) <i>Study of Boson Stars and Boson-Shells in Gravity Theory (General Relativity)</i>
15:45 - 16:15	coffee break
session VI: solvable models chair: t. b. a.	
16:15 - 16:45	Géza Lévai (Debrecen) <i>Natanzon class potentials</i>
16:50 - 17:20	Satoshi Ohya (Tokyo) <i>Exactly Solvable Bound-State Problems and Lie Algebras $so(2,1)$, $so(3)$, and $iso(2)$</i>
17:25 - 17:55	Artur Ishkhanyan (Ashtarak) <i>Solutions of the bi-confluent Heun equation in terms of the Hermite functions</i>
18:00 - 19:30	POSTER SESSION (p.t.o.)

September 12th: Tuesday

Evening programme: 18:00 - 19:30

POSTER SESSION	
chair: t. b. a.	
1.	Stanislav Skoupý (Prague) <i>Perfect state transfer by means of discrete-time quantum walk search algorithms on highly symmetric graphs</i>
2.	Jan Mazáč (Prague) <i>Quasicrystals and the affine self-similarity</i>
19:30	THE END OF THE SECOND DAY

September 13th: Wednesday

Morning programme

session VII: PT symmetry 2 chair: t. b. a.	
9:30 - 10:00	Ziad Musslimani (Tallahassee) <i>PT symmetric integrable models</i>
10:05 - 10:40	t. b. a. (t. b. a.) <i>t. b. a.</i> (30+5 min.)
10:45 - 11:15	coffee break
session VIII: linear and nonlinear optics chair: t. b. a.	
11:15 - 11:45	Ali Mostafazadeh (Istanbul) <i>Nonlinear Generalization of Spectral Singularity and Transfer Matrix</i>
11:50 - 12:20	Hugh Jones (London) <i>Properties of the Transfer Matrix</i>
12:25 - 14:00	LUNCHTIME

September 13th: Wednesday

Afternoon programme

session IX: open quantum systems 2 chair: t. b. a.	
14:00 - 14:30	Mustapha Maamache (Setif) <i>Time dependent $SU(2)$ and $SU(1,1)$ Pseudo Hermitian systems</i>
14:35 - 15:05	Manas Kulkarni (Bangalore) <i>t. b. a. (30+5 min.)</i>
15:10 - 15:40	t. b. a. (...) <i>t. b. a. (30+5 min.)</i>
15:45 - 16:15	coffee break
session X: quasicrystals chair: t. b. a.	
16:15 - 16:45	Petr Ambrož (Prague) <i>Voronoi tilings of Quasicrystals</i>
16:50 - 17:20	t. b. a. (t. b. a.)
ROUND TABLE DISCUSSION moderator: t. b. a.	
17:30 - 19:30	questions and answers, open problems
19:30	THE END OF THE THIRD DAY

September 14th: Thursday

Morning programme

session XI: mathematical physics 3 chair: t. b. a.	
9:30 - 10:00	Uwe Guenther (Dresden) <i>t. b. a.</i> (30+5 min.)
10:05 - 10:40	Joshua Feinberg (Haifa) <i>Quasi hermitian random matrices</i>
10:45 - 11:15	coffee break
session XII: constructive physics chair: t. b. a.	
11:15 - 11:45	Anna Allilueva (Moscow) <i>Waves on geometric graphs</i>
11:50 - 12:20	Francisco M. Fernández (La Plata) <i>Highly accurate calculation of the real and complex eigenvalues of one-dimensional anharmonic oscillators</i>
12:25 - 12:30	CLOSING, incl. a remark on proceedings in Acta Polytechnica
12:30	THE END OF THE CONFERENCE