

The 19th international conference
PHHQP XIX

TSIMF, Sanya, China, March 18 - 22, 2019

→ **programme** ←

final version, March 22, 2019

The first day, March 18th, Monday

Morning session

session I chair: Shao-Ming Fei	
8:30 - 8:40	OPENING (prof. Xuan Gao, the director of TSIMF)
8:40 - 9:20	Carl M. Bender (St. Louis) <i>PT symmetry in quantum mechanics and quantum field theory</i>
9:30 - 10:10	Yogesh Joglekar (Indianapolis) <i>Non-Hermitian/PT systems: Classical and quantum realizations</i>
10:15 - 10:20	GROUP PHOTO
10:20 - 10:45	COFFEE BREAK
10:45 - 11:15	Oleg Novikov (St. Petersburg) <i>Scattering in the pseudo-Hermitian quantum field theory</i>
11:25 - 11:55	Minyi Huang (Hangzhou) <i>Simulating broken PT-symmetric Hamiltonian systems by weak measurement</i>
12:00 - 14:00	LUNCH

The first day, March 18th, Monday

Afternoon session

session II	
chair: Carl M. Bender	
14:00 - 14:40	Sergii Kuzhel (Cracow) <i>Generalized Riesz systems and complete orthonormal sequences in Krein spaces</i>
14:45 - 15:25	Peng Xue (Beijing) <i>Topology in Parity-Time-symmetric quantum walks</i>
15:30 - 16:00	COFFEE BREAK
16:00 - 16:30	Franck Assogba Onanga (Indianapolis) <i>Time-invariant PT product and phase locking in PT-symmetric systems</i>
16:40 - 17:10	Iveta Semorádová (Řež) <i>The problem of coexistence of several non-Hermitian observables in PT-symmetric quantum mechanics</i>
17:15 - 17:55	Le Luo (Zhuhai) <i>An emerging non-Hermitian quantum simulator of dissipation in ultracold atoms</i>
18:00 - 19:30	DINNER

The second day, March 19th, Tuesday

Morning session

session III	
chair: Miloslav Znojil	
8:30 - 9:10	Qing-Hai Wang (Singapore) <i>Piecewise adiabatic following in non-Hermitian cycling</i>
9:20 - 10:00	Li Ge (New York) <i>Chiral symmetry in non-Hermitian systems: product rule, Clifford algebra and pseudo-chirality</i>
10:05 - 10:45	COFFEE BREAK
10:45 - 11:15	Guenter Wunner (Stuttgart) <i>Dynamics in PT-symmetric nonlinear metamaterials</i>
11:25 - 11:55	Rajkumar Roychoudhury (Kolkata) <i>Isospectral real and PT symmetric partners of a PT-symmetric Hamiltonian: A brief summary</i>
12:00 - 14:00	LUNCH

The second day, March 19th, Tuesday

Afternoon session

session IV	
chair: Naomichi Hatano	
14:00 - 14:40	Géza Lévai (Debrecen) <i>On the breakdown of super- and/or PT symmetry of solvable potentials</i>
14:50 - 15:30	Cemile Nur (Istanbul) <i>On the estimates of eigenvalues of Sturm-Liouville operators with PT-symmetric potentials</i>
15:35 - 16:00	COFFEE BREAK
16:00 - 16:30	Ananya Ghatak (Amsterdam) <i>Non-Hermitian (PT) superconductivity: BCS theory revisited</i>
16:40 - 17:10	Jiaming Li (Zhuhai) <i>PT-symmetry breaking transitions in an ultracold Fermi gas with Floquet driving</i>
17:15 - 17:55	Mustapha Maamache (Sétif) <i>Particle in an imaginary time-dependent linear potential</i>
18:00 - 19:30	DINNER

the list of posters (final version)

poster session programme	
chair: Geza Levai	
1.	Le Luo et al (Zhuhai) <i>PT random walk in a honeycomb lattice</i>
2.	Le Luo et al (Zhuhai) <i>PT system with trapped ion qubits</i>
x	Bijan Bagchi (Dedri) <i>Evolution operator for time-dependent non-Hermitian systems</i>
3.	Sachin Kumar (Mumbai) <i>Three types of discrete energy eigenvalues in complex PT-symmetric scattering potentials</i>
x	Alexander Andrianov (St. Petersburg) <i>Quantum models with Liouville field: energy density self-adjointness and semiclassical wave packets</i>
4.	Himadri Barman (Hangzhou) <i>Parity-time symmetry-breaking physics of dissipative Mott insulators</i>
x	Abdelhafid Bounames (Jijel) <i>Time-dependent non-Hermitian Hamiltonians</i>
x	Igor Barashenkov (Cape Town) <i>New PT-symmetric systems with solitons: nonlinear Dirac and Heisenberg ferromagnet equations</i>
x	Pijush K. Ghosh (Santiniketan) <i>Taming Hamiltonian systems with balanced loss and gain</i>
5.	Oleg Novikov (St. Petersburg) <i>Self-adjointness issues in the cosmology of phantom fields</i>

The third day, March 20th, Wednesday

Morning session

session V chair: Guenter Wunner	
8:30 - 9:10	Naomichi Hatano (Tokyo) <i>Exceptional points of the quantum Liouvillean dynamics</i>
9:20 - 10:00	Andrei I. Shafarevich (Moscow) <i>Semiclassical states, corresponding to separatrices of classical Hamiltonian systems</i>
10:05 - 10:45	COFFEE BREAK
10:45 - 11:15	Alan Kamuda (Cracow) <i>Naimark's dilation theorem and its application</i>
11:25 - 11:55	Ray-Kuang Lee (Hsinchu) <i>Quantum optics and potentials with PT-symmetry</i>
12:00 - 14:00	LUNCH

The third day, March 20th, Wednesday

Afternoon programme

13:30 - 19:00	SIGHTSEEING TOUR
	Yalong Bay Tropical Paradise Forest Park
19:00 - 21:00	BANQUET

The fourth day, March 21st, Thursday

Morning session

session VI chair: Qing-hai Wang	
8:30 - 9:10	Uwe Günther (Rossendorf) <i>The IR-truncated PT-symmetric $V = ix^3$ model and its asymptotic spectral scaling graph</i>
9:20 - 10:00	Miloslav Znojil (Řež) <i>Non-Hermiticities and exceptional points</i>
10:05 - 10:45	COFFEE BREAK
10:45 - 11:15	Himadri Barman (Hangzhou) <i>Parity-time symmetry-breaking mechanism of dynamic Mott transitions in dissipative systems</i>
11:25 - 11:55	Taha Koohrokhi (Gorgan) <i>Complex superpartners with spherical symmetry</i>
12:00 - 14:00	LUNCH

The fourth day, March 21st, Thursday

Afternoon session

session VII chair: Li Ge	
14:00 - 14:40	Lucrezia Cossetti (Rome) <i>Multipliers method for Spectral Theory</i>
14:50 - 15:30	Shao-Ming Fei (Beijing) <i>On characterization of quantum uncertainties</i>
15:35 - 16:00	COFFEE BREAK
16:00 - 16:30	POSTER SESSION DISCUSSION
16:40 - 17:10	Mauricio P. Pato (Sao Paulo) <i>Some eigenvalue properties of pseudo-Hermitian Gaussian matrices</i>
17:20 - 17:50	Anna Alliluieva (Moscow) <i>Behavior of short-wave and localized perturbations in relativistic hydrodynamics</i>
18:00 - 19:30	DINNER
19:30 - 20:30	INFORMAL DISCUSSIONS
20:30 - 21:00	COMMITTEES

The fifth day, March 22nd, Friday

Morning session

session VIII	
chair: Uwe Günther	
8:30 - 9:10	Yu Guo (Shanxi Datong University) <i>Monogamy of entanglement</i>
9:20 - 9:55	Anna Okopinska (Kielce) <i>Entanglement in resonant few-body states</i>
10:00 - 10:45	COFFEE BREAK
10:45 - 11:15	Li-Jun Zhao (Beihang) <i>Additivity of entanglement of formation via entanglement-breaking space</i>
11:20 - 11:50	Bing-Kun Qi (New York) <i>Linear Localization of non-Hermitian Zero Modes</i>
11:55 - 12:00	a few farewell remarks
12:00 - 14:00	LUNCH
14:00	THE END OF THE MEETING .