

YITP workshop

Resonances and non-Hermitian systems in quantum mechanics

Maskawa hall, December 11 – 13, 2012

December 11 (Tue)

12:30–13:00	Registration	
	Chair: Kiyoshi Kato	
13:00–13:10	Kiyoshi Kato	Opening
13:10–14:10	Isao Shimamura	Resonances in atomic and molecular continuum processes
14:10–15:10	Carl Bender	PT-symmetric quantum mechanics
15:10–15:40	break	
	Chair: Isao Shimamura	
15:40–16:40	Rezso Lovas	Description of Unbound States and in Terms of Unbound States
16:40–17:40	Atsushi Hosaka	Hadron resonances and their structures

December 12 (Wed)

	Chair: Toshiyuki Takayanagi	
9:00–9:40	Akinori Igarashi	Hyperspherical calculations for Coulomb three-body systems
9:40–10:20	Toru Morishita	Time-resolved analysis and visualization of correlated motions of electrons in multiply excited states of atoms
10:20–10:40	break	
	Chair: Masayasu Kamimura	
10:40–11:20	Hiroya Suno	Efimov effect and resonances in atomic and molecular physics
11:20–12:00	Toshiyuki Takayanagi	Resonances in chemical reactions: theory and experiment
12:00–13:00	Lunch	
	Chair: Naomichi Hatano	
13:00–13:40	Akinori Nishino	Many-body resonance in double quantum-dot systems
13:40–14:20	Savannah Garmon	Bound state influence on long-time non-exponential decay in open quantum systems
14:20–14:40	break	break
	Chair: Daisuke Jido	
14:40–15:20	Kanabu Nawa	Complex 2D Matrix Model and Internal Structure of Resonances
15:20–16:00	Tetsuo Hyodo	Compositeness of hadrons in field theoretical approach
16:00–18:00	Poster at K206	
18:00–20:00	Banquet at Salon	

December 13 (Thu)

	Chair: Carl Bender	
9:00–9:40	Tomio Petrosky	Exact form of the Complex Spectral Representation of the Liouvillian for Weakly Coupled One-dimensional Quantum Lorentz Gas
9:40–10:20	Naomichi Hatano	Complex eigenvalue problem of the Liouvillian of an open quantum dot system
10:20–10:40	break	break
	Chair: Tetsuo Hyodo	
10:40–11:20	Hiroyuki Kamano	How parameters of light-flavor baryon resonances are extracted from experimental data
11:20–12:00	Takayasu Sekihara	Internal structure of the resonant Lambda(1405) state in chiral dynamics
12:00–13:00	Lunch	
	Chair: Hiroyuki Kamano	
13:00–13:25	Takayuki Myo	Many-body resonances in He isotopes and those mirror nuclei
13:25–13:50	Yuma Kikuchi	Complex Scaled Lippmann-Schwinger Equation
13:50–14:15	Takaharu Otsuka	Low-lying continuum states of drip-line Oxygen isotopes
14:15–15:45	break	
	Chair: Atsushi Hosaka	
14:45–15:20	Yasuyuki Suzuki	Resonances and responses of few-body systems
15:20–15:45	Koji Arai	Astro-nuclear Reactions in the microscopic R-matrix method
15:45–16:10	Shigeyoshi Aoyama	Scattering calculations of d+d, $^3\text{He}+n$ and t+p with realistic nuclear interactions