



# Universal physics in Many-Body Quantum Systems – From Atoms to Quarks

Oct. 7 - 11, 2019, ECT\*, Trento, Italy

## Workshop Program

Oct. 7 (Monday)				
Session	Chair	Time	Speaker	Title
Registration		9.30 - 10.30		
Cold atoms, dimers, trimers	Makoto Oka	10.30 - 11.15	Hans-Werner Hammer	Universality in Few-Body systems
		11.15 - 12.00	Munekazu Horikoshi	Study of excited cluster states using Feshbach molecules
Lunch		12.00 - 14.00		
Cold atoms, dimers, trimers	Hans-Werner Hammer	14.00 - 14.45	Mario Gattobigio	Embedding nuclear physics inside the unitary-limit window
		14.45 - 15.30	Sebastian Koenig	Nuclear physics around the unitarity limit
Coffee break		15.30 - 16.00		
Free discussions		16.00 - 18.00		
Welcome buffet		18.00 - 20.00		
Oct. 8 (Tuesday)				
Session	Chair	Time	Speaker	Title
Hadron resonances, quark correlations	Atsushi Hosaka	9.00 - 9.45	Li-Sheng Geng	DK/DDK/DDDK molecules--new forms of exotic matter (talk will be given by Manuel Pavon Valderrama)
		9.45 - 10.30	Ulf Meissner	Theory of Hadron Resonances
Coffee break		10.30 - 11.00		
Hadron resonances, quark correlations	Ulf Meissner	11.00 - 11.45	Elisabetta Prencipe	Recent results from charmonium and bottomonium spectroscopy
		11.45 - 12.30	Laura Tolos	Heavy excited baryons with heavy-quark spin symmetry
Lunch		12.30 - 14.00		
Exotic nuclei, di-nucleon correlations	Sebastian Koenig	14.00 - 14.45	Takayuki Myo	Tensor and short-range correlations in light nuclei with a bare interaction
		14.45 - 15.30	Yutaka Utsuno	Recent progress in large-scale shell-model calculations
		15.30 - 16.15	Hiroshi Masui	Effect of tensor force for Iso-scaler and iso-vector correlations in nuclei
Coffee break		16.15 - 16.45		
Free discussions		16.45 - 18.00		
Social Dinner		20.00 - 22.00		Restaurant "Scigno del Duomo"
Oct. 9 (Wednesday)				
Session	Chair	Time	Speaker	Title
Quantum many-body systems	Philipp Gubler	9.00 - 9.45	Toshiki Maruyama	Molecular Dynamics Approach to Quark Many-body Systems
		9.45 - 10.30	Wael Elkamhawy	Universality and predictive power in halo nuclei
Coffee break		10.30 - 11.00		
Quantum many-body systems/ Exotic nuclei	Emiko Hiyama	11.00 - 11.45	Fabian Hildenbrand	Structure of three-body hypernuclei
		11.45 - 12.30	Lucas Platter	Halo effective field theory for Beryllium-11
Lunch		12.30 - 14.00		
Free discussions		14.00 - 16.00		
Coffee break		16.00 - 16.30		
Free discussions		16.30 - 18.00		



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Oct. 10 (Thursday)				
Session	Chair	Time	Speaker	Title
Quantum many body systems/ Hadron resonances	Atsushi Hosaka	9.00 - 9.45	Tetsuo Hyodo	Lambda(1405) as a hadronic molecule
		9.45 - 10.30	Emiko Hiyama	Structure of Xi hypernuclei with modern Xi-N interaction
Coffee break		10.30 - 11.00		
Exotic nuclei, di-nucleon correlations	Sebastian Koenig	11.00 - 11.45	Yoshiko En'yo	Alpha and di-nucleon correlations in nuclei
		11.45 - 12.30	Kazuki Yoshida	Reaction probes for the alpha clustering
Lunch		12.30 - 14.00		
Cold atoms, dimers, trimers/ Hadron resonances	Hans-Werner Hammer	14.00 - 14.45	Yusuke Nishida	Conformality, bulk viscosity, and contact correlation
		14.45 - 15.30	Manuel Pavon Valderrama	Hadronic molecules and universality
Coffee break		15.30 - 16.00		
Cold atoms, dimers, trimers	Emiko Hiyama	16.00 - 16.45	Pascal Naidon	QCD-like phase diagram of resonantly interacting SU(3) Fermi gases
		16.45 - 17.30	Christiane Schmickler	Universal physics of a few charged particles
Oct. 11 (Friday)				
Session	Chair	Time	Speaker	Title
Quantum many body systems/ Hadron resonances	Makoto Oka	9.00 - 9.45	Philipp Gubler	Simulating pA reactions to study the phi meson in nuclear matter
		9.45 - 10.30	Atsushi Hosaka	Chiral tensor dynamics for heavy baryons Pc
Coffee break		10.30 - 11.00		
Hadron resonances, quark correlations	Philipp Gubler	11.00 - 11.45	Noriyoshi Ishii	The qqbar potential from Wilson loop and the qqbar potential from Bethe-Salpeter wave function
		11.45 - 12.30	Makoto Oka	Workshop summary
Lunch		12.30 - 14.00		
Free discussions		14.00 - 16.00		
Coffee break		16.00 - 16.30		
Free discussions		16.30 - 18.00		