

Program of the Topical Meeting

« Nuclear Structure and Reactions: Building Together for the Future »

Monday, October 9, 2017

9:00 – 9:15	Registration
9:15	Welcome
	<i>Chairman: M. Płoszajczak, GANIL</i>
9:20 – 9:50	Ionel Stetcu (Los Alamos National Laboratory) Fission of actinides in real time
10:05 – 10:35	Piotr Magierski (Technical University, Warsaw) Nuclear reactions within the framework of time dependent density functional theory
10:50 – 11:10	Coffee break
11:10 – 11:40	Jutta Escher (Lawrence Livermore National Laboratory) The role of nuclear structure and reaction theory in indirect cross section measurements
11:55 – 12:25	Andrea Idini (University of Surrey) Scattering and knockout off medium mass nuclei from <i>ab initio</i> Green functions
12:40 – 14:00	Lunch
	<i>Chairman: Th. Duguet, SPhN Saclay</i>
14:00 – 14:30	Olivier Sorlin (GANIL) Two-neutron correlations observed in the decay of unbound states in ^{18}C and ^{20}O populated in high-energy knockout reactions
14:45 – 15:15	Marcella Grasso (IPN Orsay) From dilute matter to the equilibrium point in the energy-density-functional theory
15:30 – 16:00	Jerry Yang (IPN Orsay) Toward an EFT approach to nuclear system
16:15 – 16:45	Coffee break
16:45	Discussion session <i>Conveners: J. Escher, LLNL Livermore I. Stetcu, LANL</i>

Tuesday, October 10, 2017

	<i>Chairman: B.R. Barrett, University of Arizona</i>
9:00 – 9:30	Bira van Kolck (IPN Orsay) Nuclear physics from discrete scale invariance
9:45 – 10:15	Sebastian König (TU Darmstadt) Perturbative perspectives for nuclear effective field theory
10:30 – 11:00	Coffee break
11:00 – 11:30	Manolo Valderrama (Beihang University, Beijing) Nuclear interactions in effective field theory
11:45 – 12:15	Ronen Weiss (Racah Institute of Physics Jerusalem) Generalized nuclear contacts and short-range correlations
12:30 – 13:30	Lunch
	<i>Chairman: D. Lee, Michigan State University</i>
13:30 – 14:00	Petr Navratil (TRIUMF) Unifying nuclear structure and reactions: from light to medium mass nuclei
14:15 – 14:45	Patrick Reinert (Ruhr University, Bochum) Recent advances in chiral nucleon-nucleon potentials up to fifth order
15:00 – 15:30	Baishan Hu (Peking University) Gamow in medium similarity renormalization group for neutron-rich nuclei
15:45 – 16:15	Coffee break
16:15	Discussion session <i>Conveners: P. Navratil, TRIUMF B. van Kolck, IPN Orsay</i>

Wednesday, October 11, 2017

	<i>Chairman: B. Giraud, CEA Saclay</i>
9:00 – 9:30	Piet Van Isacker (GANIL) Neutron-proton pairing and double beta decay in the interacting boson model
9:45 – 10:15	N. Smirnova (CENBG Bordeaux) Shell-Model study of the isospin-symmetry breaking correction to superallowed $0^+ \rightarrow 0^+$ beta decay
10:30 – 11:00	Coffee break
11:00 – 11:30	Paul Fanto (Yale University) Neutron width statistics in a realistic resonance-reaction model
11:45 – 12:15	Nigel Orr (LPC Caen) Structure at and beyond the dripline below the oxygen anomaly
12:30 – 13:30	Lunch
	<i>Chairman: A. Ekström, Chalmers</i>
13:30 – 14:00	Thomas Duguet (SPhN Saclay) On the calculation of the norm matrix associated with a set of non-orthogonal many-body states
14:15 – 14:45	Pierre Arthuis (SPhN Saclay) Many-body perturbation theory for open-shell nuclei
15:00 – 15:30	Daniel Gazda (Chalmers University of Technology, Gothenburg) <i>Ab initio</i> nuclear structure for dark matter searches
15:45 – 16:15	Coffee break
16:15	Discussion session <i>Conveners: Th. Duguet, SPhN Saclay</i> <i>H. Feldmeier, GSI Darmstadt</i>

Thursday, October 12, 2017

	<i>Chairman: P. Navratal, TRIUMF</i>
9:00 – 9:30	Dean Lee (Michigan State University) <i>Ab initio</i> calculations of the isotopic dependence of nuclear clustering
9:45 - 10:15	Hans Feldmeier (GSI) Nuclear clustering in bound and continuum states in FMD
10:30 – 11:00	Coffee break
11:00 – 11:30	Kristina Launey (Louisiana State University) Collectivity and clustering in sd-shell nuclei from the <i>ab initio</i> symmetry-adapted no-core shell model
11:45 – 12:15	Susumu Shimoura (University of Tokyo) Tetra-neutron system studied by (${}^8\text{He}$, ${}^8\text{Be}$) reaction
12:30 – 13:30	Lunch
13:30 – 14:00	<i>Chairman: J. Carbonell, SPhN Saclay</i> Wilfried Leidemann (University of Trento) Non-strange and strange few-baryon systems: bound states and reactions via LIT method
14:15 – 14:45	Andreas Ekström (Chalmers University of Technology, Gothenburg) Delta isobars and nuclear saturation
15:00 – 15:30	Coffee break
15:30	Discussion session <i>Conveners: J. Carbonell, SPhN Saclay</i> <i>K. Launey, Louisiana State University</i>
20:00	Conference dinner

Friday, October 13, 2017

	<i>Chairman: N. Alahari, GANIL</i>
9:00 – 9:30	Denis Lacroix (IPN Orsay) Density Functional theory from unitary gas to neutron matter: equation of state, static and dynamical response
9:45 – 10:15	Pierre Capel (Université Libre de Bruxelles) Dissecting reaction calculations using halo EFT and <i>ab initio</i> input
10:30 – 11:00	Coffee break
11:00 – 11:30	Nasser Kalantar-Nayestanaki (KVI-CART, University of Groningen) The use of storage rings and active target in study of giant resonances
11:45 – 13:00	Discussion session <i>Conveners: D. Lacroix, IPN Orsay</i> <i>P. Magierski, Technical University Warsaw</i>
	Summary talk <i>B.R. Barrett, University of Arizona</i>
13:00	End of the Meeting