

The Extreme Matter Physics of Nuclei: From Universal Properties to Neutron-Rich Extremes

Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome and introduction

Monday, 16 April 2012 10:45 (15 minutes)

Presenter: SCHWENK, Achim (TUD)

Contribution ID: 1

Type: **not specified**

Comparison and Contrast of Cold Atoms and Dilute Neutron Matter

Monday, 16 April 2012 11:00 (1 hour)

Presenter: CARLSON, Joe (LANL)

Contribution ID: 2

Type: **not specified**

Improved lattice actions and operators for non-relativistic fermions

Monday, 16 April 2012 14:00 (1 hour)

Presenter: DRUT, Joaquin (LANL/Chapel Hill)

Contribution ID: 3

Type: **not specified**

Ultracold few-fermion systems with tunable interactions

Tuesday, 17 April 2012 11:00 (1 hour)

Presenter: JOCHIM, Selim (Heidelberg)

Contribution ID: 4

Type: **not specified**

Harmonic EFT: trapped atoms and liberated nucleons

Tuesday, 17 April 2012 14:00 (1 hour)

Presenter: VAN KOLCK, Bira (Paris-Sud/Arizona)

Contribution ID: 5

Type: **not specified**

Static and Dynamic Properties of the Unitary Fermi Gas

Wednesday, 18 April 2012 11:00 (1 hour)

Presenter: FORBES, Michael (Seattle)

Contribution ID: 6

Type: **not specified**

Simulating Graphene with Microwave Photonic Crystals

Wednesday, 18 April 2012 14:00 (1 hour)

Presenter: MISKI-UGLU, Maksim (TUD)

Contribution ID: 7

Type: **not specified**

Density and Spin Response of a Fermi Gas in the Attractive and Quasi-Repulsive Regime

Thursday, 19 April 2012 11:00 (1 hour)

Presenter: STRINATI, Giancarlo (Camerino)

Contribution ID: 8

Type: **not specified**

Photo reactions - from nuclei to cold atoms

Thursday, 19 April 2012 14:00 (1 hour)

Presenter: BARNEA, Nir (Jerusalem)

Contribution ID: 9

Type: **not specified**

Chiral three-nucleon forces: From neutron matter to neutron stars

Friday, 20 April 2012 10:30 (1 hour)

Presenter: HEBELER, Kai (Ohio State)

Contribution ID: **10**

Type: **not specified**

short talk

Friday, 20 April 2012 11:30 (30 minutes)

Presenters: TEWS, Ingo (TUD); KRÜGER, Thomas (TUD)

Contribution ID: **11**

Type: **not specified**

discussion on neutron matter

Friday, 20 April 2012 14:00 (2 hours)

Contribution ID: 12

Type: **not specified**

Making sense of scale- and scheme-dependent observables in low-energy nuclear physics

Monday, 23 April 2012 11:00 (1 hour)

Presenter: FURNSTAHL, Richard (Ohio State)

Contribution ID: 13

Type: **not specified**

High-Momentum Components of the Nuclear Wave function: Short Range correlation, the tensor NN interaction, and the EMC effect

Monday, 23 April 2012 14:00 (1 hour)

Presenter: PIASETZKY, Eli (Tel Aviv)

Contribution ID: 14

Type: **not specified**

Breakup Reactions and Spectroscopic Factors: a Theoretical Viewpoint

Tuesday, 24 April 2012 11:00 (1 hour)

Presenter: CAPEL, Pierre (Brussels)

Contribution ID: 15

Type: **not specified**

Spectroscopic factors for halo states from knockout reactions and Coulomb breakup

Wednesday, 25 April 2012 11:00 (1 hour)

Presenter: AUMANN, Thomas (TUD)

Contribution ID: 16

Type: **not specified**

Measuring Correlations in Isospin Asymmetric Nuclei: Why and How?"

Tuesday, 24 April 2012 14:00 (1 hour)

Presenter: LEMMON, Roy (Daresbury Laboratory)

Contribution ID: 17

Type: **not specified**

ANCs, widths, and overlaps from integral relations

Wednesday, 25 April 2012 14:00 (1 hour)

Presenter: NOLLET, Ken (ANL)

Contribution ID: **18**

Type: **not specified**

Effective Field Theory for Halo Nuclei

Thursday, 26 April 2012 11:00 (1 hour)

Presenter: HAMMER, Hans-Werner (Bonn)

Contribution ID: 19

Type: **not specified**

What information can be extracted from transfer reactions?

Thursday, 26 April 2012 14:00 (1 hour)

Presenter: MUKHAMEDZHANOV, Akram (Texas)

Contribution ID: 20

Type: **not specified**

Towards nuclear reactions with coupled- cluster theory

Friday, 27 April 2012 11:00 (1 hour)

Presenter: HAGEN, Gaute (ORNL)

Contribution ID: 21

Type: **not specified**

Universality of short-range nucleon-nucleon correlations

Friday, 27 April 2012 14:00 (1 hour)

Presenter: FELDMEIERS, Hans (GSI)

Contribution ID: 22

Type: **not specified**

Universal Thermodynamics Across the Superfluid Transition in a Strongly Interacting Fermi Gas

Monday, 30 April 2012 14:00 (45 minutes)

Presenter: ZWIERLEIN, Martin (MIT)

Contribution ID: 23

Type: **not specified**

Neutron-rich isotopes of oxygen and calcium

Monday, 30 April 2012 11:00 (30 minutes)

Presenter: PAPENBROCK, Thomas (UT/ORNL)

Contribution ID: 24

Type: **not specified**

Local chiral 3N interaction in ab initio calculations

Monday, 30 April 2012 11:30 (30 minutes)

Presenter: NAVRATIL, Petr (TRIUMF)

Contribution ID: 25

Type: **not specified**

Precision Measurements of Ground-state Properties for Nuclear Structure Studies

Wednesday, 2 May 2012 11:00 (45 minutes)

Presenter: BLAUM, Klaus (MPIK)

Contribution ID: 26

Type: **not specified**

Three-nucleon forces and masses of neutron-rich nuclei

Wednesday, 2 May 2012 14:00 (30 minutes)

Presenter: HOLT, Jason (UT/ORNL)

Contribution ID: 27

Type: **not specified**

Three-body forces and two-body currents in nuclear structure

Wednesday, 2 May 2012 14:30 (30 minutes)

Presenter: MENENDEZ, Javier (TU Darmstadt)

Contribution ID: **28**

Type: **not specified**

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Thursday, 3 May 2012 11:00 (30 minutes)

Presenter: OTSUKA, Takaharu (Tokyo)

Contribution ID: 29

Type: **not specified**

Roles of tensor and three-body forces on shell evolutions and spin degrees-of-freedom in nuclei

Thursday, 3 May 2012 11:30 (30 minutes)

Presenter: SUZUKI, Toshio (Tokyo)

Contribution ID: **30**

Type: **not specified**

Two- and three-body hyperon/nucleon interactions: are we missing something?

Thursday, 3 May 2012 14:00 (30 minutes)

Presenter: PEDERIVA, Francesco (Trento)

Contribution ID: 31

Type: **not specified**

Nuclear energy density functional from chiral two- and three-nucleon interactions

Thursday, 3 May 2012 14:30 (30 minutes)

Presenter: KAISER, Norbert (TU München)

Contribution ID: 32

Type: **not specified**

Three nucleon forces at low energy

Friday, 4 May 2012 11:00 (30 minutes)

Presenter: KREBS, Hermann (Bochum)

Contribution ID: 33

Type: **not specified**

Experimental investigations of even-A neutron-rich Carbon isotopes

Friday, 4 May 2012 14:00 (30 minutes)

Presenter: PETRI, Marina (TU Darmstadt)

Contribution ID: 34

Type: **not specified**

Ab Initio Studies with Chiral NN+3N Hamiltonians

Friday, 4 May 2012 14:30 (30 minutes)

Presenter: ROTH, Robert (TU Darmstadt)

Contribution ID: 35

Type: **not specified**

Whither HF and HFB Theory?

Monday, 7 May 2012 11:00 (45 minutes)

Presenter: BERTSCH, George (INT)

Contribution ID: 36

Type: **not specified**

Microscopically based energy density functionals

Monday, 7 May 2012 14:00 (45 minutes)

Presenter: KORTELAJNEN, Markus (Jyväskylä)

Contribution ID: 37

Type: **not specified**

Chiral Thermodynamics: from Nuclear Matter to Neutron Stars

Tuesday, 8 May 2012 11:00 (45 minutes)

Presenter: WEISE, Wolfram (TU München)

Contribution ID: **38**

Type: **not specified**

Quasiparticle interaction in nuclear and neutron matter

Tuesday, 8 May 2012 14:00 (45 minutes)

Presenter: HOLT, Jeremy (TU München)

Contribution ID: 39

Type: **not specified**

To which extent shall we talk about the single-nucleon shell structure in nuclei?

Wednesday, 9 May 2012 11:00 (45 minutes)

Presenter: DUGUET, Thomas (Saclay)

Contribution ID: 40

Type: **not specified**

Open-shell medium-mass nuclei from ab-initio Green's function calculations

Wednesday, 9 May 2012 14:00 (30 minutes)

Presenter: SOMA, Vittorio (TU Darmstadt)

Contribution ID: 41

Type: **not specified**

Two ideas for nuclear DFT (and friends)

Wednesday, 9 May 2012 14:30 (30 minutes)

Presenter: LESINSKI, Thomas (INT)

Contribution ID: 42

Type: **not specified**

Nuclear Physics from Lattice Simulations

Thursday, 10 May 2012 14:00 (1 hour)

Presenter: MEISSNER, Ulf (Bonn)

Contribution ID: 43

Type: **not specified**

Cold atoms and neutrons: variations on a theme

Thursday, 10 May 2012 11:00 (45 minutes)

Presenter: GEZERLIS, Alexandros (UW/TU Darmstadt)

Contribution ID: 44

Type: **not specified**

Probing light nuclei with external sources

Friday, 11 May 2012 11:00 (45 minutes)

Presenter: EPELBAUM, Evgeny (Bochum)

Contribution ID: 45

Type: **not specified**

Welcome

Monday, 30 April 2012 10:50 (10 minutes)

Presenter: BRAUN-MUNZINGER, Peter (GSI, EMMI)

Contribution ID: 46

Type: **not specified**

In-Medium Similarity Renormalization Group for Finite Nuclei

Friday, 11 May 2012 14:00 (45 minutes)

Presenter: HERGERT, Heiko (Ohio State)