

Monday, 9th September

Plenary Sessions

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|-------------|--|--|---|
| 9:00-9:20 | Opening | | |
| 9:20-10:10 | W. Tornow | Recent experiments involving few-nucleon systems | |
| 10:10-10:45 | E. Hiyama | Few-body structure of light hypernuclei | |
| 10:45-11:15 | Coffee break | | |
| 11:15-12:05 | W.N. Polyzou | Relativistic few-body physics | |
| 12:05-12:55 | P. Navrátil | Ab initio calculations of nuclear structure and reactions | |
| 13:00-14:30 | Lunch | | |
| 14:30-16:30 | Parallel Session A1 Relativity | Parallel Session B1 Experimental few-nucleon physics | Parallel Session C1 Strangeness 1 |
| 16:30-17:00 | Coffee break | | |
| 17:00-19:00 | Parallel Session A2 Mesons | Parallel Session B2 Theoretical methods 1 | Parallel Session C2 Atoms |

Monday, 9th September

Parallel Session A1 Relativity

| | | |
|-------------|---------------|---|
| 14:30-14:50 | B.L.G. Bakker | Compton Form Factors in Scalar QED |
| 14:50-15:10 | V.A. Karmanov | Transition e.m. form factor in the Minkowski space Bethe-Salpeter Approach |
| 15:10-15:30 | G. Salmè | Solutions of the Bethe-Salpeter Equation in Minkowski space: a comparative study |
| 15:30-15:50 | W. Schweiger | Hadron structure within the point form of relativistic quantum mechanics |
| 15:50-16:10 | A. Stadler | Singularity-free two-body equation with confining interactions in momentum space |
| 16:10-16:30 | E.P. Biernat | Confinement, quark mass functions and spontaneous chiral-symmetry breaking in Minkowski space |

Monday, 9th September

Parallel Session B1 Experimental few-nucleon physics

| | | |
|-------------|---|---|
| 14:30-14:50 | V.P. Ladygin | Few-body studies at Nuclotron-JINR |
| 14:50-15:10 | Yushi Maeda | Feasibility study of nn -resonance state search using ${}^2\text{H}(n,p)nn$ reaction at $E_n=12$ MeV |
| 15:10-15:30 | K. Bodek | A method for an unambiguous detection of a hypothetical bound two-neutron system |
| 15:30-15:42 | B. Kłos | Systematic Study of Three-Nucleon Systems Dynamics in the Cross Section of the Deuteron-Proton |
| 15:42-15:54 | K. Ohnaka | Systematic measurement of pd breakup cross section around Space Star |
| 15:54-16:06 | Yukie Maeda | Measurement of the ${}^2\text{H}(p,n)$ breakup reaction at 170 MeV and the three-nucleon force effects |
| | moved to poster session S.V. Zuyev | The results of simulation of $d+t \rightarrow {}^3\text{He}+2n; {}^2n \rightarrow n+n$ reaction |
| 16:06-16:18 | D.A. Artemenkov | Study of light nuclei cluster structure with nuclear track emulsion |

Monday, 9th September

Parallel Session C1 Strangeness 1

| | | |
|-------------|-----------------|---|
| 14:30-14:50 | T. Fukuda | Study of neutron-rich Λ hypernuclei |
| 14:50-15:10 | O. Vázquez Doce | Studies on the antikaon-nucleon interaction with the KLOE Drift Chamber |
| 15:10-15:30 | A. Scordo | Study of the $\Lambda(1405)$ resonance through its neutral and charged decay channels by AMADEUS at DAΦNE |
| 15:30-15:50 | N.V. Shevchenko | Quasi-bound and scattering states in the $\bar{K}NN-\pi\Sigma N$ system |
| 15:50-16:10 | A.J. Buchmann | Three-quark currents and baryon spin |

Monday, 9th September

Parallel Session A2 Mesons

| | | |
|-------------|----------------------|--|
| 17:00-17:20 | W. Plessas | Covariant mesonic decays of baryon resonances and coupled-channel effects |
| 17:20-17:40 | V.B. Belyaev | The rate of reaction $p+p+e \rightarrow d+v$ in the Sun |
| moved to B4 | H.-C. Kim | ϕ photoproduction near the threshold energy |
| 17:40-18:00 | M.N. Platonova | New interpretation of the ABC effect in two-pion production in NN collisions |
| 18:00-18:20 | M. Silarski | Phenomenological studies of the low energy dynamics in the ppK^+K^- system |
| 18:20-18:32 | M. Isaka | Structure of Be hyper isotopes |
| 18:32-18:44 | W. Krzemień | Search for the η -mesic ^4He with WASA-at-COSY |

Monday, 9th September

Parallel Session B2 Theoretical methods 1

| | | |
|-------------|----------------|--|
| 17:00-17:20 | A.V. Shebeko | Translationally Invariant Calculations of Form Factors, Densities and Momentum Distributions in Finite Nuclei with Short-Range Correlations Included: a Fresh Look |
| 17:20-17:40 | S.L. Yakovlev | On recent analytic results for solution of the scattering problem for sharply screened Coulomb potentials |
| 17:40-18:00 | R. Juršėnas | Bound state problem for the three-body Schrödinger equation with Euclidean invariant decaying potential |
| 18:00-18:20 | S.B. Levin | On asymptotics of the scattering problem solution of n like-charged quantum particles |
| 18:20-18:40 | A.K. Motovilov | Bounds on the shifts of binding energies and variation of the spectral subspaces of few-body Hamiltonians |
| 18:40-19:00 | Y. Lashko | Phase portraits of quantum systems |

Monday, 9th September

Parallel Session C2

Atoms

| | | |
|-------------|----------------|---|
| 17:00-17:20 | D.V. Fedorov | Three-body recombination at finite energy with optical model |
| 17:20-17:40 | A.G. Volosniev | Multicomponent Strongly-Interacting Few-Fermion Systems in One Dimension |
| 17:40-18:00 | M.T. Yamashita | Single-particle momentum distributions for bosonic trimer states in two and three dimensions |
| 18:00-18:20 | F.F. Bellotti | Mass-imbalanced Three-body Systems in 2D: bound states and the analytical approach to the adiabatic potential |
| 18:20-18:40 | B. Bazak | Multipole Analysis of Radio-Frequency Reactions in Ultracold Atoms |
| 18:40-19:00 | D. Gazda | No-Core Shell Model for Nuclear Systems with Strangeness |

Tuesday, 10th September

Plenary Sessions

| | | | |
|-------------|---|---|--|
| 9:00-9:35 | N. Zinner | Few-body Physics in a Many-Body World | |
| 9:35-10:10 | A. Feliciello | Recent experimental studies and results in the field of light hypernuclei | |
| 10:10-10:45 | H. Merkel | Precision Few-Body Experiments with Electron Beams | |
| 10:45-11:15 | Coffee break | | |
| 11:15-12:05 | E. Epelbaum | Nuclear Physics with Chiral Effective Field Theory | |
| 12:05-12:55 | H.-W. Hammer | Efimov physics from cold atoms to nuclei | |
| 13:00-14:30 | Lunch | | |
| 14:30-16:30 | Parallel Session A3 Electromagnetic processes 1 | Parallel Session B3 Light nuclei and clusters 1 | Parallel Session C3 Strangeness 2 |
| 16:30-17:00 | Coffee break | | |
| 17:00-18:52 | Parallel Session A4 Efimov physics | Parallel Session B4 Theoretical methods 2 | Parallel Session C4 Nuclear forces |

Tuesday, 10th September

Parallel Session A3

Electromagnetic processes 1

| | | |
|-------------|----------------|--|
| 14:30-14:50 | S. Scopetta | Theoretical description of deeply virtual Compton scattering off ^3He |
| 14:50-15:10 | M. Ya. Amusia | Physics of small recoil momenta in one photon-two-electron ionization of Helium |
| 15:10-15:30 | E. Garrido | Transitions between rotational nuclear few-body states in the continuum |
| 15:30-15:50 | Y. Dong | Electromagnetic transitions of $\Delta(1232)$ resonance with a point-form relativistic quantum mechanics |
| 15:50-16:10 | A. Del Dotto | Poincarè covariance and the relativistic description of SiDIS by a polarized ^3He target |
| 16:10-16:30 | D. Kupelwieser | Meson cloud effects in the electromagnetic nucleon structure |

Tuesday, 10th September

Parallel Session B3 Light nuclei and clusters 1

| | | |
|-------------|-------------------|--|
| 14:30-14:50 | G. Orlandini | Coupling Lorentz Integral Transform and Coupled Cluster Methods: a way towards continuum spectra of not-so-light systems |
| 14:50-15:10 | B.F. Gibson | ${}_{\Lambda}^6\text{H}$ Modeled as ${}_{\Lambda}^4\text{H}+n+n$ |
| 15:10-15:30 | N. Barnea | Nuclear Polarizability and the Lamb shift in Muonic Atoms |
| 15:30-15:50 | S. Ishikawa | Low-energy ${}^{12}\text{C}$ states in three- α model |
| 15:50-16:10 | C. Romero-Redondo | Ab initio NCSM/RGM for three-body cluster systems and application to ${}^4\text{He}+n+n$ |
| 16:10-16:30 | Y. Funaki | Alpha-cluster structures in light hypernuclei |

Tuesday, 10th September

Parallel Session C3 Strangeness 2

| | | |
|-------------|----------------|---|
| 14:30-14:50 | J. Haidenbauer | Hyperon-nucleon interaction in chiral effective field theory |
| 14:50-15:10 | A. Nogga | Light hypernuclei based on chiral interactions at next-to-leading order |
| 15:10-15:30 | K. Sasaki | Coupled channel approach to baryon-baryon interactions with strangeness on the lattice |
| 15:30-15:50 | A. Yokota | Possible existence of charmonium-nucleus bound states |
| 15:50-16:10 | C. Albertus | Exclusive c to s, d semileptonic decays of ground-state spin-1/2 and spin-3/2 doubly heavy cb baryons |
| 16:10-16:22 | S. Takeuchi | The isospin mixing in the $X(3872)$ decay spectrum |
| 16:22-16:34 | M. Takizawa | Radiative $X(3872)$ decays in a charmonium-molecule hybrid model |

Tuesday, 10th September

Parallel Session A4 Efimov physics

| | | |
|-------------|----------------|---|
| 17:00-17:20 | M. Gattobigio | Universality and finite-range corrections in elastic atom-dimer scattering and atomic recombination |
| 17:20-17:40 | A. Kievsky | Efimov spectrum in bosonic and fermionic systems with increasing number of particles |
| 17:40-18:00 | L. Tomio | Trimer-Tetramer interwoven states in the scaling limit |
| 18:00-18:20 | I. Mazumdar | Nuclear halos and Efimov effect: A three-body approach |
| 18:20-18:40 | E.A. Kolganova | Ultracold collisions and universal correlations |
| 18:40-18:52 | C. Schickler | Universality in the Four-Body System in an EFT Framework |

Tuesday, 10th September

Parallel Session B4 Theoretical methods 2

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|------------------|------------------------|--|
| 17:00-17:20 | G. Rawitscher | Iterative Solution of the Schrödinger Equation |
| 17:20-17:40 | L.U. Ancarani | On the failure of theoretical descriptions of double ionization of helium by high energy electron impact |
| 17:40-18:00 | W. Leidemann | Nonsymmetrized hyperspherical harmonics with realistic NN potentials |
| 18:00-18:20 | K. Topolnicki | 2N and 3N systems in a three dimensional formalism |
| CANCELLED | U. Yakshiev | Properties of nucleonic systems in a chiral soliton model |
| 18:20-18:32 | F. Kobayashi | Dineutron formation and breaking in ^8He |
| 18:32-18:52 | H.-C. Kim | ϕ photoproduction near the threshold energy |

Tuesday, 10th September

Parallel Session C4 Nuclear forces

| | | |
|-------------|------------------|--|
| 17:00-17:20 | H. Krebs | Chiral expansion of nuclear forces: explicit delta scenario |
| 17:20-17:40 | J. Gegelia | Renormalizable chiral EFT for NN scattering |
| 17:40-18:00 | E. Ruiz Arriola | Fixed points of the similarity renormalization group and the nuclear many body problem |
| 18:00-18:20 | J.E. Amaro | Error analysis of nuclear matrix elements |
| 18:20-18:40 | R. Navarro Pérez | Partial Wave Analysis of Nucleon Nucleon scattering below pion production threshold with chiral interactions |
| 18:40-18:52 | V.S. Timóteo | Implicit and explicit renormalization of the nuclear force |

Wednesday, 11th September

Plenary Sessions

| | | |
|-------------|--|--|
| 9:00-9:35 | L.E. Marcucci | Electroweak structure of light nuclei within chiral effective field theory |
| 9:35-10:10 | A. Deltuva | Four-nucleon scattering |
| 10:10-10:45 | E. Stephan | Experimental studies of few-nucleon systems at medium energies |
| 10:45-11:15 | Coffee break | |
| 11:15-12:05 | Few-Body System Award / The panel discussion on the future of the few-body physics | |
| 12:05-12:55 | The panel discussion on the future of the few-body physics | |
| 13:00-14:30 | Lunch | |
| 14:30 | Wieliczka excursion | |

Thursday, 12th September

Plenary Sessions

| | | | | | | |
|-------------|--|--|------------------------------------|--|-----------------------------|--|
| 9:00-9:35 | V.I. Kukulin | Dibaryon concept for short-range 2N and 3N forces: consequences for hadronic and nuclear physics | | | | |
| 9:35-10:10 | I. Ciepał | Investigation of the Three-Nucleon System Dynamics in the Deuteron-Proton Breakup Reaction | | | | |
| 10:10-10:45 | M.R. Schindler | Hadronic parity violation in few-nucleon systems | | | | |
| 10:45-11:15 | Conference photo and coffee break | | | | | |
| 11:15-12:05 | W. Detmold | The nucleon-nucleon interaction and light nuclei from lattice QCD | | | | |
| 12:05-12:55 | T. Frederico | Universal aspects of neutron halos in light exotic nuclei | | | | |
| 13:00-14:30 | Lunch | | | | | |
| 14:30-16:22 | Parallel Session A5 | | Parallel Session B5 | | Parallel Session C5 | |
| | Light nuclei and clusters 2 | | Properties of nuclei and reactions | | Electromagnetic processes 2 | |
| | | | | | | |
| 16:10-16:40 | Coffee break | | | | | |
| 16:40-18:00 | Poster Session | | | | | |
| 19:00 | Conference dinner | | | | | |

Thursday, 12th September

Parallel Session A5 Light nuclei and clusters 2

| | | |
|-------------|---------------|---|
| 14:30-14:50 | Ch. Elster | Momentum Space Coulomb Distorted Matrix Elements for Heavy Nuclei |
| 14:50-15:10 | D.R. Phillips | One- and two-neutron halos in effective field theory |
| 15:10-15:30 | H. Kamada | Core-Excitation Three-Cluster Model on Borromean Nuclei |
| 15:30-15:50 | S. Aoyama | Analyses of excited states in ^4He with complex scaling method |
| 15:50-16:10 | G. Hupin | Progress on Light-Ion Fusion Reactions with Three-Nucleon Forces |

Thursday, 12th September

Parallel Session B5 Properties of nuclei and reactions

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|-------------|------------------|---|
| 14:30-14:50 | Y. Fujiwara | Four-body Faddeev-Yakubovsky equations using two-cluster RGM kernels - Applications to $4N$, $4d'$ and $4a$ systems |
| 14:50-15:10 | N. Nevo Dinur | Theoretical Study of the $^4\text{He}(\gamma, n)^3\text{He}$ and $^4\text{He}(\gamma, p)^3\text{H}$ reactions |
| 15:10-15:30 | R.G. Pizzone | Trojan Horse particle invariance: an extensive study |
| 15:30-15:50 | Yu.N. Uzikov | Spin effects in the interaction of antiprotons with the deuteron at low and intermediate energies |
| 15:50-16:10 | K. Sekiguchi | Complete Set of Deuteron Analyzing Powers for dp Elastic Scattering at Intermediate Energies and Three Nucleon Forces |
| 16:10-16:22 | L.D. Blokhintsev | Characteristics of $d+a$ Bound and Resonant States from Analytic Continuation of the Effective-Range Expansion |

Thursday, 12th September

Parallel Session C5 Electromagnetic processes 2

| | | |
|-------------|-------------------|--|
| 14:30-14:50 | P. Achenbach | Recent Studies of Hypernuclei Formation with Electron Beams at MAMI |
| 14:50-15:10 | S. Širca | Study of ^3He nuclei by polarization observables in quasi-elastic electron scattering |
| 15:10-15:30 | N. Zachariou | Photodisintegration of Light Nuclei |
| 15:30-15:50 | P. Nadel-Turonski | Physics with polarized light ions at an EIC |
| 15:50-16:10 | I. Sick | Proton <i>rms</i> -radii from electron scattering |

Friday, 13th September

Plenary Sessions

| | | |
|-------------|--------------------------------------|---|
| 9:00-9:35 | R. Roth | New Horizons in Ab Initio Nuclear Structure Theory |
| 9:35-10:10 | P. Moskal | Few-body aspects of near threshold meson production |
| 10:10-10:45 | J. Vijande | Multiquark systems from a quark model perspective |
| 10:45-11:15 | Coffee break | |
| 11:15-11:50 | L. Khaykovich | Experimental study of few-body physics in ultracold atoms |
| 11:50-12:25 | K. Sagara | Recent Few-Nucleon Experiments and Discrepancies to be solved |
| 12:25-13:00 | W. Plessas | Properties of baryons as relativistic three-quark systems |
| 13:00-13:20 | G. Orlandini | Concluding remarks and closing |
| 13:20-14:30 | Lunch | |
| 14:30-17:00 | The Collegium Maius excursion | |