



INTERNATIONAL WORKSHOP ON
FEW-BODY SYSTEMS
(FBS-Dubna-2012)

BLTP, JINR, Dubna, Russia, June 27 – 29, 2012

LIST OF REGISTERED PARTICIPANTS AND TALK TITLES

1. T. A. ALYABIEVA (BLTP, JINR, Dubna)
2. V. B. BELYAEV (BLTP, JINR, Dubna), *Rate of the $p + p + e \rightarrow d + \nu$ reaction at the center of Sun conditions*
3. Y. M. BIDASYUK (Bogolyubov Institute for Theoretical Physics, Kiev, Ukraine), *Near-threshold behavior of three-particle systems in s - and p -states*
4. L. D. BLOKHINTSEV (Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University, Moscow, Russia), *Analytic continuation of effective range expansion as a method to obtain bound state characteristics. Application to ${}^6\text{Li}$*
5. M. CERKASKI (JINR, Dubna, Russia & Institute of Nuclear Physics PAN, Krakow, Poland), *Correlation effects in two-body systems in a magnetic field*
6. M. A. EFREMOV (Prokhorov General Physics Institute, Moscow, Russia & Universität Ulm, Germany), *Novel resonant states in three-body problem*
7. V. EFROS (National Research Center “Kurchatov Institute”, Moscow, Russia), *Some relativistic aspects of few-body dynamics in electrodisintegration of trinucleons*
8. I. A. EGOROVA (BLTP, JINR, Dubna), *Three-body correlations in ${}^6\text{Be}$ studied in knockout and charge exchange reactions*
9. S. N. ERSHOV (BLTP, JINR, Dubna), *New method for a solution of coupled radial Schrödinger equations: Applications to halo-nuclei*
10. S. I. FEDOTOV (BLTP, JINR, Dubna), *Transformations of the three-body pseudo-vector ($L^P = 1^+$) hyper-spherical harmonics*
11. L. V. GRIGORENKO (FLNR, JINR, Dubna), *Studies of few-body dynamics in dripline nuclei at FLNR*
12. B. E. GRINYUK (Bogolyubov Institute for Theoretical Physics, Kiev, Ukraine), *Structure properties of the four-cluster nuclei ${}^{10}\text{Be}$ and ${}^{10}\text{C}$*
13. T. GROZDANOV (Institute of Physics, University of Belgrade, Belgrade, Serbia), *Low-energy $H^+ + H_2$ reactive collisions: Role of permutation symmetry in mean-potential statistical model*

14. A. A. GUSEV (BLTP, JINR, Dubna), *Resonant tunneling of the few bound particles through repulsive barriers*
15. V. S. IURASOV (Kharkiv Karazin National University, Kharkiv, Ukraine), *Translationally invariant calculations of form factors, densities and momentum distributions in finite nuclei with short-range correlations included*
16. O. I. KARTAVTSEV (FLNP, JINR, Dubna), *Recent investigations of the two-component three-fermion system in the universal limit of zero-range interactions*
17. O. P. KLIMENKO (BLTP, JINR, Dubna)
18. E. A. KOLGANOVA (BLTP, JINR, Dubna), *The ^4He trimer as an Efimov system*
19. A. A. KOROBITSIN (BLTP, JINR, Dubna)
20. K. A. KOUZAKOV (Lomonosov Moscow State University, Moscow, Russia), *A puzzle of the $C^{6+} + He \rightarrow C^{6+} + He^+ + e$ experiment*
21. O. A. KOVAL (BLTP, JINR, Dubna)
22. E. A. KOVAL (BLTP, JINR, Dubna)
23. P. M. KRASSOVITSKIY (Institute of Nuclear Physics, Almaty, Kazakhstan)
24. V. I. KUKULIN (Institute of Nuclear Physics, Lomonosov Moscow State University, Moscow, Russia), *New way in description of few-body scattering*
25. S. N. LAKAEV (Samarkand State University, Samarkand, Uzbekistan), *Threshold effects in two- and three-body problems on lattices*
26. M. L. LEKALA (University of South Africa, Pretoria, South Africa), *The double- Λ hypernucleus ${}_{\Lambda\Lambda}^{11}\text{Be}$*
27. S. B. LEVIN (St. Petersburg State University, St. Petersburg, Russia), *The system of three three-dimensional charged quantum particles: Asymptotic behavior of the continuous spectrum eigenfunctions at infinity*
28. V. V. LYUBOSHITZ (JINR, Dubna), *Low-energy elastic scattering of a polarized neutron on a polarized deuteron*
29. A. I. MACHAVARIANI (JINR, Dubna & HEPI, Tbilisi, Georgia), *Two-body and three-body field theoretical equations with and without quark-gluon degrees of freedom*
30. L. MAJLING (Institute of Nuclear Physics, Řež, Czech Republic)
31. A. V. MALYKH (BLTP, JINR, Dubna)
32. V. S. MELEZHIK (BLTP, JINR, Dubna), *Low-dimensional few-body physics in atomic traps*
33. A. V. MELEZHYK (JINR, Dubna)

34. A.V. MIKHAILOV (Obninsk Institute for Nuclear Power Engineering of the National Research Nuclear University “MEPHI”, Obninsk, Russia), *The derivation method for the break-up amplitude in the few-particle system with the pure Coulomb interaction*
35. A.K. MOTOVILOV (BLTP, JINR, Dubna), *A priori bounds on variation of the spectrum and spectral subspaces of few-body Hamiltonians*
36. Y.V. ORLOV (Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University, Moscow, Russia), *The effective-range theory application to study the nuclear vertex constants for bound and resonant states of the lightest nuclei up to ${}^8\text{Be}$*
37. F.M. PEN’KOV (Institute of Nuclear Physics of NNC RK, Almaty, Kazakhstan), *Differential equations for the recombination amplitude in three bosons system with zero-range pair potentials*
38. V.N. PERVUSHIN (BLTP, JINR, Dubna), *Bound states in gauge theories as the Poincaré group representations*
39. B. PONS (CELIA – University of Bordeaux, Bordeaux, France), *Self-consistent Bohmian description of strong field-driven electron dynamics*
40. Y. POPOV (Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University, Moscow, Russia), *Square-integrable bases in the many-body Coulomb scattering problem*
41. V.V. PUPYSHEV (BLTP, JINR, Dubna), *Elastic scattering of a quantum particle by a central potential*
42. J. RÉVAI (Institute for Particle and Nuclear Physics, Wigner RCP, HAS, Budapest, Hungary), *Signature of the $\Lambda(1405)$ resonance in neutron spectra from the $K^- + d$ reaction*
43. O.A. RUBTSOVA (Institute of Nuclear Physics, Lomonosov Moscow State University, Moscow, Russia), *New treatment of the multi-channel continuum via the discrete spectral shift formalism*
44. W. SANDHAS (Physics Institute, University of Bonn, Bonn, Germany), *The AGS equations*
45. V.L. SHABLOV (Obninsk Institute for Nuclear Power Engineering of the National Research Nuclear University “MEPHI”, Obninsk, Russia)
46. N.V. SHEVCHENKO (Institute of Nuclear Physics, Řež, Czech Republic), *Antikaonic three-body systems*
47. V.I. SHILIN (Moscow Institute of Physics and Technology, Dolgoprudny, Russia)
48. I.I. SHLYK (BLTP, JINR, Dubna), *Low energy φ -meson-deuteron scattering in frame of the AGS equations*

49. E. A. SOLOV'EV (BLTP, JINR, Dubna), *Discrete representation for ionization process in three-body problem*
50. Y. N. UZIKOV (JINR, Dubna), *Mechanisms of the $dp \rightarrow pp_s \Delta$ reaction with formation of the 1S_0 diproton and the Δ isobar*
51. S. I. VINITSKY (BLTP, JINR, Dubna), *Resonant scattering for charged particles produced by confining environment*
52. S. L. YAKOVLEV (St Petersburg State University, St. Petersburg, Russia), *Zero-range potential for charged particles*
53. S. A. ZAITSEV (Pacific National University, Khabarovsk, Russia)
54. P. I. ZARUBIN (JINR, Dubna), *"Tomography" of cluster structure of light nuclei via relativistic dissociation*