Andrey S. Denikin – PhD (Physics and Mathematics)

Born: 24 October 1974, Novocheboksarsk, Russia
Marital Status: Married
Position:
1. Dean of Faculty of natural and engineering sciences of Dubna International University
2. Senior researcher, FLNR JINR
Address: Dubna International University, Universitetskaya str. 19, Dubna, Moscow region, 141980, Russia
Telephone, E-mail: +7 (915) 2669633, denikin@jinr.ru, andrey.denikin@gmail.com

Education and Professional activities:

1991 – 1996 Chuvash State University, Cheboksary, Russia (Faculty of Physics, specialization in theoretical nuclear physics)
1996 – 1999 Post-graduate student of Chuvash State University, Cheboksary, Russia
1999 – 2003 Fellow researcher, member of Theoretical and Computational Group of the Flerov Laboratory of Nuclear Reaction JINR, Russia
2002 Degree of Candidate of Science (PhD, Physics and Mathematics) at St. Petersburg State University ("Application of the semi-classical models to analysis of heavy ion nuclear reactions", supervisor Prof. V. Zagrebaev)
2003-2008 Scientific researcher, member of Theoretical and Computational Department of the Flerov Laboratory of Nuclear Reaction JINR, Russia
2004 position of associate professor, Nuclear physics department of Dubna International University
2008-2009 Head of Theoretical and Computational Group of the Flerov Laboratory of Nuclear Reaction JINR, Russia
2009-2015 Dean of Faculty of natural and engineering sciences of Dubna International University and senior researcher in FLNR JINR.
Since 2015 Dean of Faculty of natural and engineering sciences of Dubna International University and Head of Theoretical and Computational Group of FLNR JINR.

Educational activities:

Since 2004 Associated professor of Nuclear physics department of Dubna International University

Scientific interests:

Theoretical Nuclear Physics;
Quantum and semiclassical physics;
Direct Nuclear Reactions with Light Exotic Nuclei;
Computational Physics, Numerical Methods;
Video-graphic computer simulation of dynamical processes (C++, Java);
Nuclear Soft, Developing Knowledge Base on Low Energy Nuclear Physics (NRV project)

Main Publications:

1. *Near-barrier complete fusion and scattering reactions of deformed nuclei,*
A.S. Denikin, V.I. Zagrebaev, Bull. Russ. Acad. Sci., Ser. Fiz. v.61 (1997) pp. 819 – 827

2. *Fluctuation and chaotic motion in collision of light heavy ions: quasimolecular states,*

A.S. Denikin, V.I. Zagrebaev, Proc. of VI Intern. School-Seminar “Heavy Ion Physics” Dubna, Russia, 1997, pp. 354 – 356

3. *Semiclassical analysis of few-body weakly bound states,*
A.S. Denikin, V.I. Zagrebaev, Bull. Russ. Acad. Sci., Phys. Ser. v.63, 1999, pp. 122 – 131

4. *Mechanisms of light particle formation in heavy ion collisions,*
A.S. Denikin, V.I. Zagrebaev, Bull. Russ. Acad. Sci., Phys. Ser. v.64, 2000, pp. 2253 – 2262

5. *Comparative Analysis of the Mechanisms of Fast-Light-Particle Formation in Nucleus–Nucleus Collisions at Low and Intermediate Energies,*
A.S. Denikin, V.I. Zagrebaev, Yad. Fiz., 65, No.8 (2002) 1494-1509; Physics of Atomic Nuclei, 65, No.8 (2002) p. 1459-1473. arXive:(nucl-th/0305048)

6. *New Mechanism for the Production of the Extremely Fast Light Particles in Heavy-Ion Collisions in the Fermi Energy Domain,*
A.S. Denikin, V.I. Zagrebaev, Yad. Fiz., 66, No.8 (2003) 1582-1585; Physics of Atomic Nuclei, 66, No.8 (2003) p. 1625-1628. arXive:(nucl-th/0208041)

7. *Multidimensional Langevin Approach to Description of Near-Barrier Heavy-Ion Fusion and Deep-Inelastic Collisions,*
M.A. Naumenko, A.S. Denikin, V.I. Zagrebaev, Physics of Atomic Nuclei, v.66, 2003, pp. 1629 – 1632.

8. *Correlation studies of the ^{5}H spectrum,*
M.S.Golovkov, L.V.Grigorenko, A.S.Fomichev et al., Phys.Rev. C72 (2005) 064612

9. *Elastic and inelastic scattering of ^{6}Li on ^{12}C at 63 MeV,*
V.A.Maslov, A.S. Denikin, R.A.Astabatyan et al., Bull. Russ. Acad. Sci., Phys. Ser., v. 69, 2005, № 11, pp.1578 – 1584

10. *Role of weakly-bound nucleus break-up channels in elastic scattering with heavy ions,*
A.S. Denikin, Proc. of Int. Conf. Yong Scientists and Specialists, February 2006, Dubna, Russia, pp. 51 – 55

11. *Web-based knowledge-base on low and intermediate energy nuclear physics,*
A.S. Denikin, A.P. Alekseev, V.I. Zagrebaev et al., Proc. of Int. Conf. “Scientific services in the Internet”, Novorossisk, Russia, 18 – 23 September, 2006, p. 211 – 213

12. *Generalized optical potential of light weakly bound cluster nuclei,*
A.S. Denikin, V.I. Zagrebaev, P. Descouvemont, International Journal of Modern Physics E, **17**, No.10 (2008) 2326

13. *Generalized optical potential for weakly bound nuclei: Two-cluster projectiles,*
A.S. Denikin, V.I. Zagrebaev, P. Descouvemont, Physical Review, **C79** (2009) 024605

14. *Reconstructing the Parameters of Cluster Breakup of Light Nuclei,*
A. G. Artyukh, A. S. Denikin, Yu. M. Sereda, G. Kaminski, G. A. Kononenko, S. A. Klygin, A. N. Votontsov, B. Erdemchimeg, Yu. G. Teterev, E. A. Shevchik, Instruments and Experimental Techniques, **52**, No.1 (2009) 13

15. *Search for ^{7}H in $^{2}H + ^{8}He$ collisions,*

E. Yu. Nikolskii, A. A. Korsheninnikov, H. Otsu, H. Suzuki, K. Yoneda, H. Baba, K. Yamada, Y. Kondo, N. Aoi, A. S. Denikin, M. S. Golovkov, A. S. Fomichev, S. A. Krupko, M. Kurokawa, E. A. Kuzmin, I. Martel, W. Mittig, T. Motobayashi, T. Nakamura, M. Niikura, S. Nishimura, A. A. Ogloblin, P. Roussel-Chomaz, A. Sanchez-Benitez, Y. Satou, S. I. Sidorchuk, T. Suda, S. Takeuchi, K. Tanaka, G. M. Ter-Akopian, Y. Togano, M. Yamaguchi, Physical Review, **C81** (2010) 064606

16. *Breakup of light nuclei within the modified distorted wave Born approximation,*
A. S. Denikin, Bull. Russ. Acad. Sci.: Physics. v.74, 2010, pp. 1617 – 1623.

17. *Web knowledge base on low-energy nuclear physics,*
A. S. Denikin, V. I. Zagrebaev, A. V. Karpov, A. P. Alekseev, N. M. Jacobs, T. S. Maluleke, Proceeding of the 2nd South Africa - JINR Symposium, Dubna, September 8-10, 2010, in press.

18. *Effect of neutron rearrangement on subbarrier fusion reactions,*
A. Adel, V.A. Rachkov, A.V. Karpov, A.S. Denikin, M. Ismail, W.M. Seif, A.Y. Ellithi, Nuclear Physics A876 (2012) 119–130.

19. *Radiative Capture Reactions with the Participation of Weakly Bound Light Nuclei*
V. A. Rachkov, A. S. Denikin, Bull. Russ. Acad. Sci.: Physics. v.76, 2012, pp. 1195 – 1200.

20. *Effect of Neutron Transfer Channels in Fusion Reactions with Weakly Bound Nuclei at Subbarrier Energies,*
V. A. Rachkov, A. Adel, A. V. Karpov, A.S. Denikin and V. I. Zagrebaev, Izv. RAN [Bulletin of the Russian Academy of Sciences: Physics], 77, No.4 (2013) 411

21. *Examining the enhancement of sub-barrier fusion cross sections by neutron transfer with positive Q values,*
V.A. Rachkov, A.V. Karpov, A.S. Denikin, V. I. Zagrebaev, Physical Review, C90 (2014) 014614

22. *Study of internal structures of 9,10Be and 10B in scattering of 4He from 9Be,*
S.M. Lukyanov, A.S Denikin, E.I. Voskoboynik, S.V. Khlebnikov, M.N. Harakeh, V.A. Maslov, Yu.E. Penionzhkevich, Yu.G. Sobolev, W.H. Trzaska, G.P. Tyurin, K.A. Kuterbekov, J. Phys. G: Nucl. Part. Phys., 41 (2014) 035102

23. Does neutron rearrangement enhance the cross sections of the subbarrier fusion of atomic nuclei?
V. A. Rachkov, A. V. Karpov , A. S. Denikin, and V. I. Zagrebaev, Izv. RAN [Bulletin of the Russian Academy of Sciences: Physics], 78, No.11 (2014) 1117.

24. *Properties of light nuclei by inelastic scattering and nucleon transfer in 3,4He + 9Be reactions at low energies*
A.S. Denikin, S.M. Lukyanov, Yu.E. Penionzhkevich, N.K. Skobelev, Yu.G. Sobolev, E.I. Voskoboynik, W.H. Trzaska, G.P. Tyurin, J. Mrazek, V. Kroha, V. Brujan, S. Piskor, V. Glagolev, S.V. Khlebnikov, M.N. Harakeh, K.A. Kuterbekov, Proceedings of the International Symposium on Exotic Nuclei, EXON 2014 (Kaliningrad, Russia, 8-13 September 2014), (2014) 73.

25. *Study of the effects of nuclear and Coulomb interactions in the breakup of 19C on 208Pb,*
B. Mukeru, M. L. Lekala, A.S. Denikin, J. Phys. G: Nucl. Part. Phys. 42 (2015) 015109

26. *Role of the diagonal and off-diagonal continuum-continuum couplings in the breakup of 8B and 19C on 58Ni and 208Pb targets*,
B. Mukeru, M. L. Lekala, A.S. Denikin, Nuclear Physics A, A935 (2015) 18

27. *Role of neutron rearrangement channels in sub-barrier fusion*
A. V. Karpov, V. A. Rachkov, A. S. Denikin and V. I. Zagrebaev, AIP Conference Proceedings, 86 (2015) 17.

26. *^{6}Li breakup and suppression of complete fusion above the Coulomb barrier*
N.A. Elmahdy, A.S. Denikin, M. Ismail and A.Y. Ellithi, Eur. Phys. Journal, A51 (2015) 62.