

CURRICULUM VITAE

of Dmitri I. KAZAKOV

Date & place of birth: October 6, 1951, Moscow, USSR

Citizenship: Russian Federation

Nationality: Russian

Marital status: Married, two children

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Joint Institute for Nuclear Research (Dubna),
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Undergraduate Education: Moscow State University, Physics Dep.,
1968-1974

Graduate Education: Laboratory of Theoretical Physics, Joint
Institute for Nuclear Research, 1974-1977

Graduate Thesis: Renormalizations in the theories with dynamical
symmetry, 1977 (Supervisor Prof.D.V.Shirkov)

Gradual Degree: Candidate of Science in Physics and Mathematics
(Ph.D.),
Laboratory of Theoretical Physics, JINR, 1977

Habilitation Thesis: Finite supersymmetric models of quantum field
theory, 1988

Habilitation Degree: Doctor of Science in Physics and Mathematics,
Laboratory of Theoretical Physics, JINR, 1988

Title: Professor of physics (physics of elementary particles), 2005
Corresponding member of Russian Academy of Sciences,
2016

Position:

Laboratory of Theoretical Physics, JINR since 1975

1975-1978 - Junior Research Scientist

1979-1988 - Senior Research Scientist

1989-1991 - Leading Research Scientist

1991-1998 - Quantum Field Theory Group Leader

1994-1998 - Deputy leader of "Particle and Fields" division of Lab.
Theor. Phys.

1998-2004 - Leader of "Particle and Fields" division of Lab. Theor.
Phys.

1998- 2003 - Deputy Director of Lab. Theor. Phys.

2003-2016 - Principle Research Scientist at BLTP, JINR

2004-2016 - Leader of "Particle Physics" division of Lab. Theor.
Phys.

2016 - Head of "Theory of Fundamental Interactions" Division of
Lab. Theor. Phys.

2017- Director of Laboratory of Theoretical Physics

1999-2016 Head of Laboratory of fundamental interactions at the
Institute

for Theoretical and Experimental Physics, Moscow

2005- Professor of Moscow Institute of Physics and Technology

2012 - Head of Chair of Fundamental and Applied Problems of
Microworld of Moscow Institute of Physics and Technology

Teaching: Lectures on Quantum Field Theory and Particle Physics
- Moscow State University 1984-1986, 1997

- Moscow Institute of Physics and Technology, 1998-2019,
- CERN-JINR (European) Schools of Physics 1981, 1983, 1987, 1989, 1991, 1993, 1994, 1995, 1996, 2000, 2004, 2012, 2017
- JINR Schools of Physics 1988, 1990, 1992, 2003, 2005, 2009, 2012, 2016, 2019
- ITEP Schools of Physics 1984, 1996, 1999, 2005, 2006, 2008, 2011, 2012, 2013, 2016, 2019
- Karlsruhe University (Germany) 1992, 1994, 1996-1997, 2000, 2009, 2010
- Lyon University (France) 2003, 2006, 2008
- Cargese School on Particle Physics and Cosmology, 2003
- Corfu School of Physics, Greece, 1999, 2014
- Dynasty Foundation School on Fundamental Interactions, 2006, 2012

- Supervisor of 12 PhD and 15 Undergraduate theses

Other activities:

- Deputy leader of Nuclear Physics Department of Russian Academy of Sciences, 2017-
- Editor-in-chief of "Theoretical and Mathematical Physics" 2022-
- Member of editorial board of "Theoretical and Mathematical Physics" 2013-
- Member of editorial board of "Physics-Uspekhi (Advances in Physical Sciences)" 2015-
- Member of the Expert Council for Theoretical Physics of the Russian Foundation for Basic Research, 1996-1999
- Head of the Expert Council for Theoretical Physics of the Russian Foundation for Basic Research, 2009- 2013
- Chairman of the expert Council of the Basis Foundation, 2016-
- Member of the Organizing Committee of the European Schools for High-Energy Physics, 1991-1997

- Member of the Steering Committee of Heisenberg-Landau Program (JINR-Germany Collaboration), 1994-1998, 2002-2008, 2010-2016
- Member of the Steering Committee of the Blokhintsev-Votruba Program (JINR-Chekhia Collaboration), 2000-2009, 2011-
- Member and/or chairman of the Organizing Committees of several International conferences

Publications: 220 (see the list attached)

Visits:

- Short-stay visits from 1 to 2 months to CERN, Germany, France, Spain, Italy, Finland, USA, UK
- Senior SERC Fellow (Southampton Univ., UK) in 1991-1992, 1993.
- Guest Professor at Karlsruhe University, Germany, 1996-1997, 2009
- Mercator Professor, University of Karlsruhe, 2010-2012, 2015-2016
- Visiting Professor at KEK, Japan, 2001, 2004, 2009.

Grants:

- International Science Foundation 1993-1994,
- Russian Foundation for Basic Research 1993-1994, 1995-1998, 1999-2002, 2002-2004, 2005-2007, 2008-2010, 2011-2013, 2014-2016, 2016-2019
- RFBR-DFG (Germany) joint grant 1996-1998, 2001-2003
- DFG (Germany) 2000-2006
- Russian State Scientific Stipendium 1997-1999, 1999-2002
- Russian Scientific Fund 2016-2018, 2019-2020

Awards:

- JINR Prize for Theoretical Physics: 1980, 2004
- Bogoliubov International Prize for Theoretical physics, 2019

Special talks:

- Plenary talk on "Beyond the Standard Model", at XXXIII International Conference on High Energy Physics (ICHEP'06), Moscow, 2006.
- Invited talk "SUSY today" at Rencontres de Moriond-2013, La Thuile, 2013
- Invited talk on "Beyond the Standard Model" at 11th ICFA Seminar on Future Perspectives in High Energy Physics, Beijing, 2014
- Invited concluding talk "Theory Vision" at the Third Annual Conference on Physics at Large Hadron Collider, St. Petersburg, 2015

Recent Publications (2017-2022)

1 Perspectives of direct Detection of supersymmetric Dark Matter in the NMSSM,
Phys.Lett. B771 (2017) 611-618, arXiv:1703.01255 [hep-ph], (with C.Beskidt, W. de Boer and S.Wayand).

2 Ultraviolet divergences in D=8 N=1 supersymmetric Yang–Mills theory,
Theor.Math.Phys. 192 (2017) no.1, 1016-1027, Teor.Mat.Fiz. 192 (2017) no.1, 89-102,
(with D.E.Vlasenko).

3 Can we discover a light singlet-like NMSSM Higgs boson at the LHC? ,
Phys.Lett. B782 (2018) 69-76, arXiv:1712.02531 [hep-ph], (with C.Beskidt and W. de Boer).

4 Beyond the Standard Model' 17, Proceedings of European School on High Energy Physics,
CERN Yellow Rep.School Proc. 3 (2018) 83-131, arXiv:1807.00148 [hep-ph]

5 Structure of UV divergences in maximally supersymmetric gauge theories,

Phys.Rev. D97 (2018) no.12, 125008, arXiv:1712.04348 [hep-th],
(with A.T.Borlakov, D.M.Tolkachev and D.E.Vlasenko).

6 Kinematically Dependent Renormalization,

Phys.Lett. B786 (2018) 327-331, arXiv:1804.08387 [hep-th]

7 High Energy Behavior in Maximally Supersymmetric Gauge Theories in Various Dimensions,

Symmetry 11 (2019) no.1, 104, arXiv:1812.11084 [hep-th],
(with L.V.Bork, A.T.Borlakov, D.M.Tolkachev and D.E.Vlasenko).

8 Prospects of Elementary Particle Physics, Physics Uspekhi, 62 (4) 364 - 377 (2019)

9 RG Equations and High Energy Behaviour in Non-Renormalizable Theories,

Phys.Lett.B 797 (2019) 134801, arXiv:1904.08690 [hep-th]

10 Dual Conformal Symmetry and Iterative Integrals in Six Dimensions,

JHEP 06 (2020) 186, arXiv:2002.05479 [hep-th], (with L.V.Bork, R.M.Iakhibbaev and D.M.Tolkachev)

11 The Bogolyubov R-Operation in Nonrenormalizable Theories,

Phys.Part.Nucl. 51 (2020) 4, 503-507

12 On Renormalizations in Nonrenormalizable Theories,

Proceedings of the Steklov Institute of Mathematics, 2020, Vol. 309, pp. 1–8.

13 UV divergences, RG equations and high energy behaviour of the amplitudes in the Wess-Zumino model with quartic interaction, JHEP 06 (2022) 141, arXiv: 2112.03091 [hep-th] (with L.V.Bork)

14 UV Divergences of Scattering amplitudes in D-dimensional
Yang-Mills Theories,
arXiv: 2204.00789 [hep-th] (with A.T.Borlakov)