

EMIL NISSIMOV
Curriculum Vita

Work Address

Institute of Nuclear Research
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BIRTH: October 20, 1949, in Sofia, Bulgaria
MARITAL STATUS: married, one child
LANGUAGES: Bulgarian – mother tongue; Russian, English, German – free;
Hebrew – fair; French – mediocre

Education ST.PETERSBURG STATE UNIVERSITY St. Petersburg, Russia
1975-1978

Ph.D. graduate student. Ph.D. degree in Theor. Physics - 1978; supervisor: Prof. L.D. Faddeev . Ph.D. Thesis (1978): “*Infinite Series of Higher Quantum Conserved Currents in Two-Dimensional Completely Integrable Field Theory Models*”

SOFIA UNIVERSITY Sofia, Bulgaria
1968-1973

Undergraduate and M.S. studies. M.S. degree in Physics - 1973 ; supervisor: Prof. I.T. Todorov

Field of Research

Theoretical and Mathematical Physics, Theory of Elementary Particles, High Energy Physics, General Relativity and Gravitation

Research Interests

Generalized gravity and nonlinear gauge theories, generalized string and p -brane models (strings/branes with dynamical tension, lightlike branes) – with applications in elementary particle physics, black hole and wormhole physics, and cosmology; Completely integrable models; Quantum groups and Hopf algebras - applications in physics; Group-theoretical approach to conformal field theories based on the method of group coadjoint orbits; Covariant quantization of strings with manifest space-time supersymmetry; Covariant quantization of constrained systems ; Stochastic quantization ; Non-perturbative aspects of gauge theories – renormalization of non-renormalizable theories, anomalies in odd dimensions, dynamical mass generation, dynamical generation of gauge bosons and Chern-Simmons terms, $1/N$ expansion, dynamical symmetry breaking; Field-theoretic approach in the theory of phase transitions and critical behaviour.

Publications Total number (as of Aug 2018) – 145;
Phys. Lett. B – 27; *Phys. Lett. A* – 3; *Nucl. Phys. B* – 5; *Comm. Math. Phys.* –

2; *Mod. Phys. Lett. A* – 4; *Int. Journ. Mod. Phys. A* – 8; *Int. Journ. Mod. Phys. D* – 1; *Journ. Math. Phys.* – 2; *Phys. Rev. D* – 2; *Gen. Rel. Grav.* – 2; *Class. Quant. Grav.* – 1; *Theor. Math. Phys.* – 5; *J.E.T.P. Letters* – 1; *Lett. Math. Phys.* – 11; *EuroPhys. Journ. B* – 1; *EuroPhys. Journ. C* – 2; *Fortschritte der Physik* – 2; *Centr.Europ.J.Phys.* – 1; *Astronom. Nachrichten* – 1; *Appl. Analysis* – 1; *Invertis Journal of Sci. and Technology* – 1; *The Open Nuclear and Particle Physics Journal* – 1; *Bulg. Journ. Phys.* – 16; *Comp. Rend. Acad. Sci. Bulg.* – 2; *Proceedings of International Conferences* (full text contributions) – 38; *Preprints* – 7

Citations and Impact Factor

Total number of independent citations (as of Aug 2018): 1387

H-index: 21

Total Impact Factor: 279.308

Google Scholar profile:

http://scholar.google.bg/citations?hl=en&user=60RCkzUAAAAJ&view_op=list_works&pagesize=100

Employment	<p>INSTITUTE OF NUCLEAR RESEACH Sofia, Bulgaria 1988–present Corresponding Member of Bulgarian Academy of Sciences (since 2014); Full Professor (since 2008); Doctor of Sciences (Doctor Habil.) (2007); Senior research staff member (equiv. to Associate professor) (1988–2007); Head of Laboratory (Department) “Theory of Elementary Particles” (since 2001) Member of Institute’s Scientific Board (since 2003)</p> <p>INSTITUTE OF NUCLEAR RESEACH Sofia, Bulgaria 1979–1988 Research staff member (equiv. to Assistant professor)</p> <p>BEN-GURION UNIVERSITY OF THE NEGEV Beer Sheva, Israel 1991–1994, 1995–1999 Visiting professor and research staff member; “Shapiro” fellowship 1991–1994; “Giladi” fellowship 1996–1999</p> <p>HEBREW UNIVERSITY Jerusalem, Israel Feb 1991 – July 1991 Visiting professor</p>
Visits	<p>BEN-GURION UNIVERSITY OF THE NEGEV Beer-Sheva, Israel 2001–2019 Exchange agreement with Bulgarian Academy of Sciences</p> <p>UNIVERSITY OF PATRAS Patras, Greece 2003 NATO CLG fellow</p>

UNIVERSITY OF ILLINOIS 1995, 1996, 1998, 1999, 2000 NSF-grant fellow (1998–2000)	Chicago, U.S.A.
UNIVERSITY OF FREIBURG 1993, 1995 <i>DAAD (German Academic Exchange) fellow</i>	Freiburg i.Br., Germany
WEIZMANN INSTITUTE OF SCIENCE 1987–1990 Long-term visitor (1987,1988); Visiting professor (1989,1990)	Rehovot, Israel
CERN, THEORY DIVISION 1985–1986 Scientific associate - one-year term; Short-term visitor (1989, 1992, 2000)	Geneva, Switzerland
ROME UNIVERSITY “LA SAPIENZA” 1989	Rome, Italy
RUSSIAN ACADEMY OF SCIENCES 1981, 1985, 1987 Scientific Visitor at Steklov Mathematical Institute and Lebedev Physical Institute.	Moscow, Russia
JOINT INSTITUTE FOR NUCLEAR RESEARCH 1981/2/3/4/5/7/8	Dubna, Russia
SERVICE DE PHYSIQUE THEOR. C.E.N. 1983	Saclay, France
INTERNATIONAL CENTER FOR THEOR. PHYSICS 1980, 1984, 1986, 1987	Trieste, Italy

Grants and Awards

COST - EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY	2017–2021
COST Action CA16104 “Gravitational waves, black holes and fundamental physics” (GWnivers) – Member of Management Committee	
COST - EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY	2014–2018
COST Action MP1405 “The Quantum Structure of Spacetime” (QSPACE) – Mem- ber of Management Committee	

COST - EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY	2013–2017
COST Action MP1210 “The String Theory Universe”	
EUROPEAN COMMISSION	2004–2008
FP6 Marie Curie Research Training Network “ <i>Forces-Universe</i> ” <i>MRTN-CT-2004-005104</i> , contact person for Sofia node	
EUROPEAN COMMISSION	2002–2006
FP5 Research Training Network “ <i>EUCLID</i> ” <i>HPRN-CT-2002-00325</i>	
BEN-GURION UNIVERSITY OF THE NEGEV, ISRAEL	2001–2019
Exchange Agreement with Bulgarian Academy of Sciences	
Grant 2001–2004 (project coordinator); Grant 2004–2007 (project coordinator);	
Grant 2007–2009 (project coordinator); Grant 2009–2013 (project coordinator);	
Grant 2013–2016 (project coordinator); Grant 2016–2019 (project coordinator);	
NATO SCIENCE DIVISION	2002–2004
NATO Collaborative Linkage Grant <i>PST.CLG.978785</i>	
NATIONAL SCIENCE FOUNDATION, U.S.A.	1997–2000
NSF Grant <i>INT-9724747</i>	
ISRAELI MINISTRY OF ABSORPTION	1996–1999
“Giladi” Fellowship	
ISRAELI MINISTRY OF SCIENCE	1991–1994
“Shapiro” Fellowship	
BULGARIAN NATIONAL SCIENCE FOUNDATION	
1994–1998: Grant <i>F-401/94</i> (project coordinator);	
2000–2004: Grant <i>F-904/99</i> (project coordinator);	
2004–2008: Grant <i>F-1412/04</i> (project coordinator);	
2008–2012: Grant <i>DO 02-257</i> of Framework Program “ <i>Ideas</i> ” (acting project coordinator);	
2015–2017: Grant <i>DFNI T02/6</i> (deputy project coordinator) 2017–2020: Grant <i>DN 18/1</i> (project coordinator)	
MINISTRY OF SCIENCE AND TECHNOLOGY OF BULGARIA	
1984: <i>Bulgarian National Prize for Young Scientists</i> ;	
1987–1991: Project grant <i>F-003/87</i> (participant);	
1987–1991: Project grant <i>F-403/87</i> (participant)	