

EMIL NISSIMOV

Curriculum Vita

Work Address

Institute of Nuclear Research
and Nuclear Energy
Bulgarian Academy of Sciences
Tsarigradsko Chaussee 72
BG-1784 Sofia, Bulgaria

Telephone

Office: (+359-2) 9795-647
Home: (+359-2) 8736821, (+359-2) 4708879
E-mail: nissimov@inrne.bas.bg
Fax : (+359-2) 975-3619

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 Nov 2018) – 146;
Phys. Lett. B – 27; *Phys. Lett. A* – 3; *Nucl. Phys. B* – 5; *Comm. Math. Phys.* –

2; *Mod. Phys. Lett. A* – 5; *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.* – 17; *Comp. Rend. Acad. Sci. Bulg.* – 2; *Proceedings of International Conferences* (full text contributions) – 38; *Preprints* – 6

Citations and Impact Factor

Total number of independent citations (as of Dec 2018): 1409

H-index: 21

Total Impact Factor: 281.533

Google Scholar profile:

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

Employment	INSTITUTE OF NUCLEAR RESEACH 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)	Sofia, Bulgaria
	INSTITUTE OF NUCLEAR RESEACH 1979–1988 Research staff member (equiv. to Assistant professor)	Sofia, Bulgaria
	BEN-GURION UNIVERSITY OF THE NEGEV 1991–1994, 1995–1999 Visiting professor and research staff member; “Shapiro” fellowship 1991–1994; “Giladi” fellowship 1996–1999	Beer Sheva, Israel
	HEBREW UNIVERSITY Feb 1991 – July 1991 Visiting professor	Jerusalem, Israel
Visits	BEN-GURION UNIVERSITY OF THE NEGEV 2001–2019 Exchange agreement with Bulgarian Academy of Sciences	Beer-Sheva, Israel
	UNIVERSITY OF PATRAS 2003 NATO CLG fellow	Patras, Greece

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	2016–2020
COST Action CA15117 “Cosmology and Astrophysics Network for Theoretical	

Advances and Training Actions” (CANTATA) – Subst. Member of Management Committee

COST - EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY 2014–2018

COST Action MP1405 “The Quantum Structure of Spacetime” (QSPACE) – Member 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 “Forces-Universe” MRTN-CT-2004-005104, contact person for Sofia node

EUROPEAN COMMISSION 2002–2006

FP5 Research Training Network “EUCLID” HPRN-CT-2002-00325

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 *PST.CLG.978785*

NATIONAL SCIENCE FOUNDATION, U.S.A. 1997–2000

NSF Grant *INT-9724747*

ISRAELI MINISTRY OF ABSORPTION 1996–1999

“Giladi” Fellowship

ISRAELI MINISTRY OF SCIENCE 1991–1994

“Shapiro” Fellowship

BULGARIAN NATIONAL SCIENCE FOUNDATION

1994–1998: Grant *F-401/94* (project coordinator);

2000–2004: Grant *F-904/99* (project coordinator);

2004–2008: Grant *F-1412/04* (project coordinator);

2008–2012: Grant *DO 02-257* of Framework Program “*Ideas*” (acting project coordinator);

2015–2017: Grant *DFNI T02/6* (deputy project coordinator)

2017–2020: Grant *DN 18/1* (project coordinator)

MINISTRY OF SCIENCE AND TECHNOLOGY OF BULGARIA

1984: *Bulgarian National Prize for Young Scientists* ;

1987–1991: Project grant *F-003/87* (participant);

1987–1991: Project grant *F-403/87* (participant)