

## CURRICULUM VITAE

Dr. Dimiter Loukanov BALABANSKI

**Date of birth:** 29.10.1954, Sofia, Bulgaria

**Nationality:** Bulgarian

**Address:** Monah Spiridon 8, Dragalevtsi, BG-1415 Sofia, Bulgaria (permanent)  
Uranus 42D, bl. 4, apt. 13, 077125 Magurele, Romania (current)

### **Education:**

1975 – 1980: St. Kliment Ohridski University of Sofia, Physics Engineering, Bulgaria  
1968 – 1973: English Language Secondary School, Sofia, Bulgaria

### **Scientific degrees:**

2014: Professor and PhD Thesis Adviser, University Politehnica, Bucharest, Romania  
2014: Head of Research: Nuclear Physics and Applications with High-Brilliance Gamma Beams, ELI-NP, IFIN-HH, Magurele, Romania  
2013: Senior Researcher CS I, ELI-NP, IFIN-HH, Magurele, Romania  
2007: Senior Researcher II, INRNE, Bulgarian Academy of Sciences  
1997: Associate Professor of Physics, St. Kliment Ohridsky University of Sofia, Bulgaria  
1993: Ph.D. in Physics, St. Kliment Ohridsky University of Sofia, Bulgaria  
1980: Nuclear Engineer, St. Kliment Ohridsky University of Sofia, Bulgaria

### **Positions:**

since 2013: ELI-NP, IFIN-HH, Senior Researcher CS I, Head of Research Activity, Magurele, Romania  
2007 – 2013: INRNE, Bulgarian Academy of Sciences, Senior Researcher II  
2003 – 2007: University of Camerino, Italy, Professor (4 years position of the Italian Ministry of Education)  
1997 – 2003: Faculty of Physics, St. Kliment Ohridsky University of Sofia, Bulgaria, Associate Professor  
1985 – 1996: Faculty of Physics, St. Kliment Ohridsky University of Sofia, Bulgaria, Assistant Professor  
1980 – 1985: Faculty of Physics, St. Kliment Ohridsky University of Sofia, Bulgaria, Researcher

### **Positions as visiting scientist:**

2009 – 2015: University Paris-Sud, France, Visiting Professor (in total ½ year)  
2007: CSNSM, Orsay, France, CNRS Visiting Research Professor (three months)  
1999 – 2002: University of Tennessee, Knoxville and ORNL, Oak Ridge, TN, USA, Guest Professor  
(in total 1 ½ years)  
1995 – 2003: University of Leuven, Belgium, Visiting Scholar (fellowships of EC: HPRI-1999-CT50001, NATO, the Ministry of Science and Technologies of Belgium and the Flemish Science Foundation; in total 5 years)  
1994 – 1996: University of Milano and INFN-Milano, Italy, Visiting Scientist (INFN fellowships, total ½ year)  
1987 – 1993: Visiting Scientist, Forschungszentrum Juelich, Germany (fellowships of IAEA, Vienna and FZ-Juelich, in total 3 ½ years)

### **Research activities:**

Photofission  
IGISOL technique  
Photonuclear processes and nuclear photonics  
Structure of atomic nuclei at high angular momenta  
Structure of atomic nuclei away from the stability line  
Dynamic symmetries in atomic nuclei  
Design of multidetector systems for nuclear spectroscopy  
Isotope glaciology (1988 – 2000)  
Moessbauer spectroscopy (1980 – 1987)  
Applied nuclear physics (1980 – 1987)

**Scientific projects:**

- 2011 – 2013: coordinator of bilateral projects with the Bulgarian National Science Fund (France DRILA-01/8 and Germany DNTS/GERMANY-01/7)
- 2010 – 2014: FP7 I3 ENSAR (262010) project (European Nuclear Science and Applications Research), coordinator of the Bulgarian team, work package leader (JRA06 EWIRA – East-West Integrated Research Activity), member of the Scientific Council and of the Program Coordination Committee
- 2009 – 2013: projects with the Bulgarian National Science Fund (DRNF-02/5 – coordinator, DID-02/16 and DNTS-02/21 – team member)
- 2007 – 2011: Spirall2 Preparatory Phase project: EC FP7 Spiral2PP (212692); head of the Bulgarian team and member of the Steering Committee of the PARIS project to construct a  $4\pi$  scintillator array
- 2003 – 2009: nuclear data evaluation; IAEA Research Contract No. 12482 (2005 – 2008)
- 2003 – 2012: leader of the Bulgarian team and member of the Steering Committee of the AGATA project to construct an European gamma-ray tracking array; EC FP6 project RII3 – EURONS: 506065
- 2002 – 2004: co-chair of a NATO CLG “New dynamic symmetries in atomic nuclei” (joint research project of the Istanbul and the Bosphoros Universities, Istanbul, Turkey, Yale University, New Haven, USA, NCSR” Demokritos”, Athens, Greece and IFIN-HH, Bucharest, Romania
- since 1995: team leader of *more than 25* experimental projects to study the structure and the symmetries in atomic nuclei: at the INFN LNL laboratory in Legnaro, Italy (three), the National Accelerator Center iThemba lab, Cape Town, South Africa (three), Yale University, New Haven, USA (four), the ORNL National Laboratory, Oak Ridge, USA (one), the State University of Florida, Tallahassee, USA (one), the CYCLONE accelerator laboratory, Louvain-le-Neuve, Belgium (two), the Australian National University, Canberra, (one), the Tandem laboratory, Orsay, France (six), GSI, Darmstadt, Germany (one), ILL, Grenoble, France (five), GANIL, France (three), the Institute of Modern Physics, Lanzhou, China (one), the Tandem Laboratory, Bucharest, Romania (three), ATOMKI, Debrecen, Hungary (one) and ISOLDE at CERN (one).
- 1995 – 1998: head of the Bulgarian Antarctic Glaciological Program, field work during the 1995, 1996 and 1998 polar campaigns
- 1993 – 1994: projects for computerization of the Physics Library of the University of Sofia and setting of a LAN and internet connection of the Faculty of Physics of the University of Sofia, projects with the Open Society Fund (Soros Foundation), Sofia, Bulgaria

**Scientific papers and conference reports:**

Papers in refereed international journals: >120  
Conference papers in refereed international journals: >60  
Papers in conference proceedings: >75  
Papers in Bulgarian journals: >10  
Papers in Laboratory Annual Reports: >50  
Invited seminars: >20  
Invited talks at conferences: >50  
Plenary talks at conferences and workshops: >60  
Citations (SCI): > 2000  
h-index: 33

**Lecture courses:**

- (a) St. Kliment Ohridsky University of Sofia  
1995/96: Atomic and Nuclear Physics (for Physics students)  
1994/95, 1995/96: Atomic and Nuclear Physics (for Geology students)  
1995/96, 1996/97, 1997/98, 2002/03: Nuclear structure (for M.S. students in Nuclear Physics)
- (b) University of Camerino, Italy  
2003/04, 2004/05: Nuclear spectroscopy
- (c) University Politehnica Bucharest

2015/16, 2016/17, 2017/2018, 2018/2019: Research Opportunities at ELI-NP (M.S. students in Laser and Accelerator Technologies)

**Diploma and Ph.D students:**

since 2015: adviser of *eight* students at SDIALA, University Politehnica Bucharest

2005 - 2010: consultant of *three* Ph.D. students at the University of Sofia (two), at the University of Istanbul (one).

2018: defended Liliya Atanasova (U. Sofia) at present Assist. Professor, Medical University Sofia

2009: defended Lidya Susam (University of Istanbul) at present Assoc. Professor, U. Istanbul

1996 - 2006: adviser of *seven* Ph.D. students at the University of Sofia

2001: defended Georgi Rainovski, at present Professor and Dean of Physics, U. Sofia

2003: defended Miroslav Danchev, Assoc. Professor, U. Sofia (2009-2015), now in IT company

2004: defended Kalin Gladnishki, at present Assoc. Professor, U. Sofia

2005: defended Andrej Blazhev, at present Lecturer, U. Koeln

2005: defended Radomira Lozeva, at present Researcher at CSNSM, Orsay

1996 – 2018: referee (jury member) of 9 Ph.D. theses in Bulgaria, Belgium, Germany, Australia and India

1991 – 2013: adviser of 12 M.S. theses at the University of Sofia, one at the University of Camerino and one at the Southwestern University of Blagoevgrad

**Serving the scientific community:**

2011 – 2014: member of the Board of the Bulgarian Union of Physicists

2010 – 2017: member of the International PAC of the Tandem-ALTO Laboratory at Orsay, Paris, France

2009 – 2015: member of the Nuclear Physics Board of the European Physical Society

2009 – 2016: member of the International PAC of the Heavy Ion Laboratory, Warsaw University, Poland

2009: member of the International PAC of the Tandem Laboratory, IFIN-HH, Bucharest, Romania

2008 – 2013: member of the International PAC of the FP7-REGPOT-2008-1 LIBRA 210123 project at NCSR “Demokritos”, Athens, Greece

2008 – 2012: chair of the South-Eastern European Nuclear Physics Network (2002 – 2008 vice-chair)

2008 – 2012: co-chair of the European Network of NSDD evaluators (since 2002 NSDD expert)

2007 – 2014: member of the Steering Committee of the PARIS project for the construction of a  $4\pi$  spectrometer of  $\text{LaBr}_3:\text{Ce}$  detectors

2006 – 2012: co-chair of an Working Party to study nuclear electromagnetic moments within the SPIRAL2 project, Caen, France

2004 – 2012: coordinator of an Working Group to study nuclear electromagnetic moments and member of the Technical Board of the HiSpec/DeSpec project within the NUSTAR collaboration (project FAIR)

2003 – 2012: member of the Steering Committee of the AGATA project for the construction of a  $4\pi$  spectrometer of segmented HPGe detectors

since 2002: referee of Physical Review Letters, Physical Review C, Journal of Physics G, European Physical Journal A, Physics Letters A and B, New Journal of Physics, Review of Scientific Instruments, Europhysics Letters and Annals of Nuclear Energy

2000 – 2003: coordinator of an Working Group for ground-state properties and fundamental interactions within the EURISOL preliminary design study, EC FP5 project HPRI-1999-CT50001

1999 – 2011: Bulgarian correspondent of Nuclear Physics News Magazine of NuPECC

1998 – 2008: chair or member of the Organizing/Program Committee of more than *ten* international conferences and workshops

1998 – 2002: founder and chair/member of the Organizing Committee of the Balkan workshop on Nuclear Physics and Applications (Tsigov Chark, Bulgaria – 1999, Edirne, Turkey – 2001, Tirgoviste, Romania – 2002); now Balkan Workshop on Applied Physics which is held annually in Constanta, Romania

1997: co-founder and member of the Board of Directors of the Balkan School on Nuclear Physics (Istanbul, Turkey – 1998, Bodrum, Turkey – 2000, Thessaloniki, Greece – 2002, Bodrum, Turkey – 2004, Brasov, Romania – 2006, Troyan, Bulgaria – 2008; Adrasan, Antalya, Turkey – 2010; Blagoevgrad,

Bulgaria – 2012)

***Membership in scientific organizations***

European Physical Society – individual member

Bulgarian Union of Physicists

Bulgarian Antarctic Institute

***Prizes and Awards***

2009: Pythagoras Prize of the Bulgarian Ministry of Education, Youth and Science for an Established Scientist in the field of Natural Sciences and Mathematics

1997: NATO Research Fellow

1987: IAEA Research Fellow

***Languages:***

Bulgarian – mother tongue

English – written and spoken

Russian, German – use at working level

Italian, Dutch, Serbian – use with dictionary