

Dr. Elena-Mirela Babalic

Contact information

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Research experience

Jan. 2020 - onwards: **Senior Researcher (CS 2)**, Department of Theoretical Physics, National Institute of Physics (NIPNE), Bucharest, Romania

Oct. 2017 – Jan. 2020: **Researcher (CS 3)**, Department of Theoretical Physics, National Institute of Physics (NIPNE), Bucharest, Romania

Oct. 2015 – Oct. 2017: **Postdoctoral Researcher** at IBS – Center for Geometry and Physics, Pohang, Korea

Dec. 2013 – Oct. 2015: **Researcher (CS 3)**, Department of Theoretical Physics, National Institute of Physics (NIPNE), Bucharest, Romania

Oct. 2010 – Dec. 2013: **Researcher (CS)**, Department of Theoretical Physics, National Institute of Physics (NIPNE), Bucharest, Romania

Jun. 2009 – Sep. 2010: **Postdoctoral Research Assistant**, Department of Theoretical Physics, National Institute of Physics (NIPNE), Bucharest, Romania

Sep. 2007 – Aug. 2008: **Early Stage Researcher** in Superstring Theory (position within "The European Superstring Theory Network"), Dept. of Fundamental Physics, Chalmers University of Technology, Göteborg, Sweden. Research area: cohomological aspects in supersymmetric field theory. Supervisors: Prof. Lars Brink and Prof. Niclas Wyllard.

Education

2009: **Ph.D. in Theoretical Physics** (awarded cum laudae), University of Craiova, Romania
Thesis title: "*Symmetries, Supersymmetries and Cohomologies in Gauge Theories*"
Supervisor: Prof. Solange-Odile Saliu

2003: **M.Sc. (Theoretical High Energy Physics)**, University of Craiova, Romania
Dissertation: "*Two-dimensional tensor-vector interactions*"
Supervisor: Prof. Constantin Bizdadea

2002: **B.Sc. (Physics)**, University of Craiova, Romania

1998: Baccalaureate Diploma, Nicolae Titulescu College (Specialty: Mathematical-Physics), Craiova

Research Grants

Oct. 2015 – Oct 2017: member in the Research Grant **IBS-R003-S1** from the Korean government at IBS-CGP, Pohang, on the theme “Constructive string field theory of open-closed topological B-type strings”

Apr. 2014 – Oct. 2015: **Principal Investigator** of the strategic postdoctoral grant gained by competition, **POSDRU /159/1.5/S/133255**, Project ID **133255 (2014)**, co-financed by the European Social Fund within the Sectorial Operational Program Human Resources Development 2007-2013, in partnership with the University of Craiova, Romania

Mar. - Apr. 2014 – funding from CERN for a 2 weeks visit to CERN Theory Division

2011 – 2015: member in the Romanian Research Council grant, CNCS **PN-II-ID-PCE**, contract no. **121/2011** (Principal investigator: Prof. Irinel Caprini)

2010 – 2013: member in the Romanian Research Council grant, CNCS **PN-II-RU-TE**, contract no. **77/2010** (Principal investigator: Dr. Andrei Micu)

Jun. 2009 – Dec. 2010: member in the Romanian Research Council grant, CNCS **PN-II-ID-PCE**, contract no. **464/2009**, (Principal investigator: Prof. Irinel Caprini)

Apr. - Nov. 2010: member in the Romanian Research Council grant, ANCS Euratom **PC7/Capacities**, contract no. **98/2008** (Principal investigator: Prof. Pometescu Nicolae)

Sep. 2007 – Aug. 2008: member in the European Research grant, contract **MRTN-CT-2004-512194 – Superstrings – REF RTD REG/T.3(2007)D/516925** (PI: Prof. Lars Brink)

Awards

2017 Stefan Procopiu prize of the Romanian Academy for the research activity in 2015 on 8-dimensional compactifications of 11-dimensional supergravity

2010: Serban Titeica Prize for remarkable scientific contributions of young researchers, awarded by Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH)

Computing skills

- experienced user of Linux and Windows
- experienced user of Office
- experienced user in some expert symbolic computation packages (Mathematica, Matlab)
- experience with web design (Joomla, Seamonkey)
- website administrator for <http://events.theory.nipne.ro/gap/>

Other Scientific Activities

- Organizer of the “Bucharest Conference on Geometry and Physics”, September 2-6, 2019, IMAR, Bucharest, Romania (<https://events.theory.nipne.ro/gap/index.php/conference>)
- Organizer of the conference “String Field Theory of Landau-Ginzburg models”, September 11-15, 2017, IBS Center for Geometry and Physics, Pohang, Korea (<https://cgp.ibs.re.kr/activities/conferences/String%20Field%20Theory%20of%20Landau-Ginzburg%20models>)
- Organizer of the “Geometry and Physics seminar” within the Department of Theoretical Physics, NIPNE, Bucharest, Romania (<https://events.theory.nipne.ro/gap/index.php/seminar>)
- Member in the organization team of the “Bucharest PhD Training School”, under the CERN-SEENET-MTP PhD Training Program, in collaboration with IFIN-HH and University of Bucharest, 8-14 Nov. 2015, <http://events.theory.nipne.ro/hepSchool-2015/>

Language Proficiency

Fluent written and spoken: **English** (excellent), **French** (very good), **Spanish** (good)

Publications and preprints

https://www.nipne.ro/7358-staff_info.html

Seminar and conference talks

https://www.nipne.ro/7358-staff_info.html