

Curriculum Vitae

Name: **Assoc. Prof. RNDr. Martin Plesch, PhD.**

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Work:

- 2010 – ... Masaryk University Brno, Marie Currie fellow, researcher
2001 – ... Institute of Physics Slovak Academy of Sciences
Head of the Department of Complex Physical Systems since 2019
Independent researcher position since 2009
Manager of the Institute (2007 – 2011)
PhD study (2001 – 2004)
2012 Research stay at Clarendon laboratory, University of Oxford
2009 – 2010 University of Vienna, research stay
2004 – 2010 Quiniverse, NGO in Bratislava, statutory representative and researcher
2001 – 2003 Institute of Didactics of Physics FMFI UK, assistant professor

Qualification:

- 2014 Faculty of Math, Physics and Informatics, Comenius University (FMFI UK) Bratislava, Assoc. Prof.
2005 Institute of Physics Slovak Academy of Sciences (IPSAS), PhD.
2003 FMFI UK Bratislava, RNDr.
1996 – 2001 Department of theoretical physics FMFI UK, MSc.
1999 – 2000 Innsbruck University, Austria, two semester study of theoretical physics
1999 European Centre for Nuclear Research (CERN), Switzerland, study stay
1998 Centre for Research of Heavy Ions (GSI), Germany, study stay

Other positions:

- 2018 – ... Scientific board of IPSAS, member
2017 – ... Dionýz Ilkovič national-wide prize for teachers, Head of the jury
2015 – ... International Young Physicists' Tournament (IYPT), President
2015 – ... Editorial board member, Nature Scientific Reports
2009 – ... Member of the PhD. scientific committee in Didactics of Physics, FMFI UK
2008 – ... Member of the Bc. scientific committee in Physics, FMFI UK
2008 – ... International Junior Science Olympiad, deputy leader in Slovakia
2006 – 2015 International Young Physicists' Tournament (IYPT), Secretary General
2004 – ... Evaluator of European and national projects
2003 – ... Referee of *PRL*, *PRA*, *PRX*, *Physics Letters A*, *European Physics Letters*, *New Journal of Physics*, *European Journal of Physics D* and *Mathematical reviews AMS*
2001 – ... Young Physicists' Tournament, president and later vice-president in Slovakia
2002 – 2004 Association of Slovak PhD. students (ADS), founding member and member of Executive committee

Awards:

- 2016 Prize for popularization of Science, PosAm
2015 "Social Innovator" award for education by Pontis and Ashoka foundations
2012 Member of Common room at Wolfson College, Oxford
2009 Action Austria – Slovakia, Jubilee stipend
2005 *Werner von Siemens Excellence Award* – award for the best research group
2005 Award of *Štefan Schwarz* by the Slovak Academy of Sciences

Languages:

Slovak	Mother tongue
Czech	Excellent speaking and writing
English	Excellent speaking and writing
German	Excellent speaking and reading, good in writing

IT:

MS Windows	User and administration
MS Office	User
Mathematica	User
Hardware	Administration and installation

Publications:

Publications	46 Scientific + 12 other
Citations	448 together (229 WOS)
International conferences	55+ (active participation)
Invited talks	9
h-index WOS/Scholar	9/12

Organization of conferences and events

Central European Quantum Information Processing workshop, Znojmo/Valtice/Telč/Jindřichův Hradec, Czech Republic; Smolenice, Slovakia

2001 – 2009, 2012 Member of the organizing committee

2007 Member of the steering committee

Young European Physicists' workshop, Budmerice, Slovakia

2003 - 2006 Member of the organizing committee

Quantum Information in V4, summer school, Budmerice

2009 Member of the organizing committee

School of mathematical Physics, Stará Lesná, Slovakia

2008 Member of the organizing committee

Young Physicists' Tournament national competition

2001 – ... Annual opening conference and national competition, main organizer

2006 International Young Physicists' Tournament competition, deputy main organizer

International Junior Science Olympiad

2006 - ... Annual national competition, main organizer

Lecturing

2007 – 2010, 2013 – 2017, 2019 Quantum information theory, Bc. students FMFI UK

2010 – 2014 Quantum seminar, Faculty of IT sciences, Masaryk University Brno

2011 – 2012 Quantum theory for IT scientists, Faculty of IT sciences, Masaryk University Brno

2004 – ... Soft skills, project preparation and management for various organizations

2001 – 2003 Solving of physical problems on high schools, Didactics of Physics Bc. students FMFI UK

Leading of students

2019 - ... Rudolf Maďoran, MUNI, bachelor student

2018 – 2020 Mirdit Doda, IPSAS, PhD student

2014 – 2016 Michal Hledík, bachelor student, FMFI, Comenius University, Bratislava

2011 – 2013 Bc. Michal Polkoráb, Bc. Jiří Locker, Bc. Branislav Machlica, Bc. Jozef Šebesta, master students, Faculty of IT sciences, Masaryk Univ. Brno

2007 – 2009 Marcela Hrdá, bachelor student, FMFI, Comenius University, Bratislava

2004 – 2006 Bc. Michal Sedlák, master student, FMFI, Comenius University, Bratislava

Participation on selected projects:

Erasmus +

- DIBALI, IPSAS, 2019 – 2022, 220000,- EUR, Coordinator

Seventh framework program EC

- PAQIT, MUNI, 2010 – 2012, 113000,- EUR, PI
- RAQUEL, MUNI, 2012 – 2015, 1,5 million EUR, team members
- *Q-ESSENCE*, IPSAS, 2009, 4 million €, assistant to coordinator in preparation phase

Sixth framework program EC

- *CONQUEST*, IPSAS, 2004 till 2008, 100 million Sk, assistant of the coordinator, team member
- *QIST*, IPSAS, 2005 till 2007, 1 million Sk, team member
- *QAP*, IPSAS, 2005 till 2009, 8 million Sk, team member and manager
- *QUROPE*, IPSAS, 2005 till 2009, 800 000 Sk, team members

Slovak Research and Development Agency

- General call, NANOTIP, Institute of Physics SAS, 2012 till 2015, 200 000,- €, team members
- SK-AT 2010, *Coarse grained measurements of spin systems*, Institute of Physics SAS, 2011 till 2012, 4000 €, PI
- LPP 2009, *Young Physicists' Tournament*, TMF, 2009 till 2013, 130 000 €, PI
- LPP 2009, *International Junior Science Olympiad*, TMF, 2009 till 2013, 130 000 €, PI deputy
- LPP 2009, *Physics by Physicists*, FU SAV, 2009 till 2012, 70 000 €, PI
- General call, *Quantum Information Aspect of Quantum Measurements*, Quniverse, 2008 till 2010, 200 000,- €, team members
- General call, *Physics of Quantum Information*, Quniverse, 2005 till 2007, 4,5 million Sk, team members
- LPP 2006, *Young Physicists' Tournament*, TMF, 2006 till 2010, 2,2 million Sk, PI
- LPP 2006, *Soft skills for young scientists*, Eurea, 2006 and 2007, 500 000 Sk, PI

European Social Fund

- *Center for development of PhD. students*, Institute of Physics SAS, 2010 till 2013, 324 000 €, PI
- *Management of EU programs and projects*, Eurea, 2006 till 2008, 50 000 €, PI
- *Young Physicists' Tournament*, Eurea, 2006 till 2008, 35 000 €, PI
- *Institute of Advanced Studies*, Quniverse, 2005 till 2007, 200 000 €, PI deputy

GAČR

- *Multipartite quantum entanglement and security*, 2017 – 2019, Deputy coordinator
- *Rényi entropy in QI processing*, 2016, team member
- *Weak sources of entanglement and randomness*, 2012 till 2015, team member

VEGA

- *Benchmarking Quantum computers on Cloud*, Institute of Physics SAS, 2019 till 2022, PI
- *Weak randomness in quantum protocols*, Institute of Physics SAS, 2015 till 2018, PI
- *Local properties of complex spin systems*, Institute of Physics SAS, 2012 till 2014, PI

International Visegrad fund

- *Young Physicists' Tournament in V4*, TMF, 2009 till 2010, 4 100 €, PI
- *Quantum Technologies in V4*, FU SAV, 2008 till 2009, 12 000 €, PI

More than 15 other projects in science, popularization of science, further education and transparency.