

Curriculum vitae

PERSONAL INFORMATION

Boglárka Erdős



☎ (+36) 30 694 6932 📠 (+36) 1 392 2222/33-55

✉ erdos.boglarka@energia.mta.hu

EDUCATION AND TRAINING

- 2018–Present** **PhD Student**
Budapest University of Technology and Economics, Budapest (Hungary)
Topic: Contaminations and selectivity of silicon charged particle detectors for space weather and space dosimetry measurements
- 2016–2018** **MSc in Physics**
Budapest University of Technology and Economics, Budapest (Hungary)
Department of Nuclear Techniques
Thesis: Investigation of runaway electron generation in tokamak disruptions
- 2012–2016** **BSc in Energy Engineering**
Budapest University of Technology and Economics, Budapest (Hungary)
Department of Nuclear Energy
Thesis: Investigation of runaway electron generation in tokamak disruptions

WORK EXPERIENCE

- 2018–Present** **Junior researcher**
Centre for Energy Research, Budapest (Hungary)
Space Research Department
Until Aug. 31, 2019: Centre for Energy Research, Hungarian Academy of Sciences
- 2016–Present** **Teaching Assistant at Department of Nuclear Techniques**
Budapest University of Technology and Economics, Budapest (Hungary)
- 2015–2018** **Participation in EUROfusion research projects**
WP-MST1-AUG15-1.3.5: (ASDEX Upgrade, IPP Garching)
WP-MST1 2017 HLT8 (ASDEX Upgrade, IPP Garching, Swiss Plasma Center, EPFL)

PERSONAL SKILLS

Mother tongue(s) Hungarian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	B2	B2	C1

	Intermediate level, complex language exam, B2 Spoken English Test for Business, B1				
German	B1	B1	A2	A2	A2
	Intermediate level, complex language exam, B2				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

Publications

- B. Erdős, A. Hirn, B. Zábóri:** Cosmic radiation environment modelling for the ESEO mission, *Proceedings of the 3rd Symposium on Space Educational Activities (2019) (submitted)*
- B. Erdős:** Modelling and calibrating charged particle detector telescopes with Monte Carlo simulations, *Proceedings of the PhD workshop of the Physics Doctoral School at the Faculty of Natural Sciences Budapest University of Technology and Economics, Ook Press Ltd. (2019)*
- B. Erdős, A. Hirn, B. Zábóri:** Monte Carlo modelling of charged particle detectors for space dosimetry, *Proceedings of the Hungarian Space Research Forum MUF2019-K04 (2019)*
- G.I. Pokol, M. Aradi, B. Erdos, et. al.:** Development of the runaway electron modelling capabilities of the European Transport Simulator, *44th EPS Conference on Plasma Physics, P2.178*
- G. Papp, (...), B. Erdos, et. al.:** Runaway electron generation and mitigation on the European medium sized tokamaks ASDEX Upgrade and TCV, *Proceedings of the 26rd IAEA Fusion Energy Conference, number OV/P-12*
- H. Meyer, (...), B. Erdos et. al.:** Overview of progress in European Medium Sized Tokamaks towards an integrated plasma-edge/wall solution, *Nuclear Fusion, 57(10):102014, 2017*
- G.I. Pokol, (...), B. Erdős et al:** Application limits of runaway electron modeling based on analytical formulas of generation and loss rates, *42nd EPS Conference on Plasma Physics, ECA 39E P5.169*

Conferences

- 2019: **Workshops on Radiation Monitoring for the International Space Station**, Athens, Greece, *Talk: RADTEL charged particle detector for space weather measurements as part of the RadMag system (in English)*
- 2019: **Symposium on Space Educational Activities**, Leicester, United Kingdom, *Talk: Cosmic radiation environment modelling for the ESEO mission (in English)*
- 2019: **Hungarian Space Research Forum**, Sopron, Hungary, *Talk: Monte Carlo modelling of charged particle detectors for space dosimetry (in Hungarian)*
- 2017: **XVth Symposium of the Hungarian Nuclear Society**, Budapest, Hungary, *Talk: Dependence of runaway electron generation mechanism on disruption parameters (in Hungarian)*
- 2017: **5th Runaway Electron Meeting**, Liblice, Czech Republic, *Talk: 1D runaway electron modelling with GO for ASDEX Upgrade and ETS (in English)*
- 2017: **8th Hungarian Plasma Physics and Fusion Technology Workshop**, Esztergom, Hungary, *Talk: Self-consistent runaway electron modelling (in English)*
- 2015: **7th Hungarian Plasma Physics and Fusion Technology Workshop**, Tengelic, Hungary, *Poster: Numerical analysis of runaway electron dynamics (in English)*

Honours and awards

- 2017: Outstanding Student of the Faculty
- 2017: National Scientific Students' Associations Conference: Special Award
- 2016: Scientific Student Conference, BME TTK: 3RD prize
- 2015: Scientific Student Conference, BME TTK: 2ND prize

Skills

- Programming skills: **MATLAB, Python**
- Advanced knowledge of MS Office softwares and **LaTeX**
- User level knowledge: **Inventor, AutoCAD, Adobe Photoshop, Adobe InDesign, GaBi** (Life Cycle Assessment Software), **Unix operating systems, Content management systems, Version Control Systems**
- Driving licence: Category B

Courses 2019: **Advanced radiation protection course**
2019: **XVI Seminar on Software for Nuclear, Subnuclear and Applied Physics**, Alghero, Italy,
Summer school on Geant4 Monte Carlo simulation code

Memberships 2015-Present: Hungarian Nuclear Society - Fusion Professional Group
2014-2018: BME NTI Fusion Plasma Physics Research Group
2014-2017: Institute of Electrical and Electronics Engineers, BUTE IAS/PES Joint SB Chapter
2012-2017: Student Association of Energy