BOGLÁRKA TÓTH

E-mail: toth.boglarrka@gmail.com ***Tel.:+36703853741***

EDUCATION:

2015-2018: Physicist (BSc), Budapest University of Technology and Economics
2018-2020: Physicist (MSc), Budapest University of Technology and Economics
2020-2025: PhD Budapest University of Technology and Economics, Doctoral School of Physics: *„Spectroscopic studies in magnetoelectric and spiral antiferromagnets”* Supervisor: Dr. Bordács Sándor

TEACHING ACTIVITIES:

Mathematics A1a – Analysis
Mathematics A2a – Vector functions
Physics laboratory exercises
Solid-state physics practical course
Data collection and evaluation

AWARDS:

2018: Conference of Scientific Students' Associations (TDK): commendation
2019: Conference of Scientific Students' Associations (TDK): 1st place

LANGUAGES:

Hungarian: native
English: complex B2
German: complex C1

POPULARIZATION OF SCIENCE:

BME Science Camp: organizer, laboratory tours
Girls’ Day: laboratory tours
University, faculty open days, miscellaneous laboratory tours

CONFERENCES:

4th Grandmaster Early-Career Workshop in Physics 2019. Split, Croatia (presentation)
5th Grandmaster Early-Career Workshop in Physics 2020. Prague, Czech Republic (online presentation)
International Conference on Strongly Correlated Electron Systems (SCES) 2022. Amsterdam, Netherlands (poster)
6th Grandmaster Early-Career Workshop in Physics (GEWP) 2023. Cluj-Napoca, Romania (invited speaker)
87th Annual Conference of the Deutsche Physikalische Gesellschaft (DPG) and DPG Spring Meeting 2024. Berlin, Germany (presentation)

SCIENTIFIC PUBLICATIONS:

- Molnár B., Tolnai G., Tóth B., Légrády D., Horváth A.; *Guardyan – a novel GPU–based Monte Carlo code for simulating reactor transients (in Hungarian).* Nukleon XII., 1, 218 (2019).
- B. Tóth, K. Amelin T. Rõõm, U. Nagel, A. Bauernfeind, V. Tsurkan, L. Prodan, H.-A. Krug von Nidda, M. Scheffler, I. Kézsmárki and S. Bordács*;* Broadband magnetic resonance spectroscopy in $MnSc_2S_4$. *Sci Rep* **13**, 11069 (2023).
- B. Tóth, D. G. Farkas, K. Amelin, T. Rõõm, U. Nagel, L. Udvardi, L. Szunyogh, L. Rózsa T. Ito and S. Bordács; *Terahertz spin-wave excitations in the transverse conical phase of* $BiFeO_3$. Phys. Rev. B **109**, 144424 (2024).
- B. Tóth, V. Kocsis, Y. Tokunaga, Y. Taguchi, Y. Tokura, and S. Bordács; *Imaging antiferromagnetic domains in* $LiCoPO_4$ *via the optical magnetoelectric effect.* Phys. Rev. B **110**, L100405 (2024).
- M. Winkler, K. Geirhos, T. Tyborowski, B. Tóth, D. G. Farkas, J. S. White, T. Ito, S. Krohns, P. Lunkenheimer, S. Bordács, I. Kézsmárki; *Anisotropic magnetocapacitance of antiferromagnetic cycloids in* $BiFeO_3$. Appl. Phys. Lett. **125**, 252902 (2024).