

CURRICULUM VITAE

PERSONAL DATA

Full name Gabriel Pristáš, Ph.D.
Date of birth 14 April, 1981
Work address Institute of Experimental Physics, Slovak
Academy of Sciences, Watsonova 47, 040 01
Košice, Slovak Republic

EDUCATION

September 2004 to September 2008 Full-time PhD study: Condensed Matter Physics
Institute of Experimental Physics, Slovak
Academy of Sciences in Košice, Slovak Republic
September 2002 to June 2004 Master's degree in physics: Condensed Matter
Physics, Faculty of Science of Šafárik University in
Košice, Slovak Republic

ACADEMIC EXPERIENCE

May 2011 to present Senior researcher at the Institute of Experimental
Physics, Slovak Academy of Sciences, Košice,
Centre of Low Temperature Physics
February 2019 (1 month) Vienna University of Technology, Institute of
Solid-State Physics, SAS-ERC visiting grant, Prof.
N. Barisić
October 2016 (2 weeks) Helmholtz-Zentrum Berlin, Germany, research
stay; Dr. K. Siemensmeyer
Jan 2015 (6 months) Vienna University of Technology, Institute of
Solid-State Physics, **ERC project** - Project ass.,
Prof. Dr. S. Bühler-Paschen
May 2014 (1 month) University of Hyogo, SPring-8, Japan, research
stay; Dr. T. Mito
April 2013 (1 month) CSEC, University of Edinburgh, research stay; Dr.
K. V. Kamenev
May 2009 to April 2011 (2 years) Postdoctoral fellowship by Japan Society for the
Promotion of Science (JSPS) at the University of
Hyogo, Electro-physics laboratory - NMR under
pressure; Prof. T. Kohara, Dr. T. Mito

September 2008 (8 months)	Postdoctoral position at the Institute of Experimental Physics, Slovakia; Point-contact and tunnelling spectroscopy, Prof. P. Samuely
April 2008 (5 weeks)	Vienna University of Technology, Institute of Solid-State Physics, research stay; Prof. E. Bauer
October 2007 (2 months)	Wihuri Physical Laboratory, Department of Physics, University of Turku, Finland, research stay; Prof. K. Gloos
November 2006 (1 month)	Institute of Physics ASCR, Prague; research stay, Dr. J. Ruzs
September 2006 (10 days)	European Advanced Cryogenic School, Low Temperature Group, Eindhoven University of Technology, Netherlands
August 2006 (2 weeks)	"Magnetic Fields for Science", school organized by Grenoble High Magnetic Field Laboratory, Cargese, France
May 2006 (2 weeks)	CNRS, GHMFL, Grenoble, France, research stay; Dr. A.G.M. Jansen

RESEARCH INTEREST

Experimental study of strongly correlated electron systems, high pressure physics, superconductivity, thin films

PRESENTATIONS AND SKILLS

Oral presentations	EHPRG 2022, KSF 2022, CSMAG 2007
Poster presentations	LT 2022, SCTE 2018, SCES 2017, SCES 2016, CSMAG 2016, SCES 2013, CSMAG 2013, JPS 2010, ICHE 2010, LT 2008, ICM 2006, SCES 2005
Experimental Skills	High pressure technique, low temperature physics, transport measurements (electrical resistivity, heat capacity, magnetization), NMR, point-contact spectroscopy

AWARDS AND ACHIEVEMENTS

2022	Science award by Slovak Physical Society
2011	President of the Slovak Republic Prize - Sova
2011	Schwarz Foundation by SAS, Postdoctoral fellowship

2009	Prize of Slovak Physical Society for Young Scientists
2007	The SPP Foundation- Scholarship "Hlavička" (Smart Head)

GRANTS

2020 - 2023	VEGA by Scientific Grant Agency
2019	SAS-ERC Visiting Grant

SELECTED PUBLICATIONS

In total: 60 CC publications, 412 citations (Scopus), h-index 11

1. G. PRISTÁŠ, J. Bačkai, M. Orendáč, S. Gabáni, F. Košuth, M. Kuzmiak, P. Szabó, E. Gažo, R. Franz, S. Hirn, G. C. Gruber, Ch. Mitterer, S. Vorobiov, K. Flachbart: Superconductivity in medium- and high-entropy alloy thin films: Impact of thickness and external pressure.

Physical Review B 107, 024505 (2023).

2. G. PRISTÁŠ, M. Orendáč, S. Gabáni, J. Kačmarčík, E. Gažo, Z. Pribulová, A. Correa-Orellana, E. Herrera, H. Suderow, P. Samuely: Pressure effect on the superconducting and the normal state of beta-Bi2Pd. *Physical Review B* 97,134505 (2018).

3. Mat. Orendáč, S. Gabáni, E. Gažo, G. PRISTÁŠ, N. Yu. Shitsevalova, K. Siemensmeyer, K. Flachbart: Rotating magnetocaloric effect and unusual magnetic features in metallic strongly anisotropic geometrically frustrated TmB₄. *Scientific Reports* 8, 10933 (2018).

4. N. Emi, M. Mizumaki, T. Koyama, N. Ishimatsu, G. PRISTÁŠ, T. Kagayama, K. Shimizu, Y. Osanai, F. Iga, T. Mito: Kondo-like behavior near the magnetic instability in SmB₆: Temperature and pressure dependences of the Sm valence. *Physical Review B* 97, R161116 (2018).

5. M. Orendáč, S. Gabáni, G. PRISTÁŠ, E. Gažo, P. Diko, P. Farkašovský, A. Levchenko, N. Shitsevalova, K. Flachbart: Isosbestic points in doped SmB₆ as features of universality and property tuning. *Physical Review B* 96, 115101 (2017).

6. K. Nishiyama, T. Mito, G. PRISTÁŠ, T. Koyama, K. Ueda, T. Kohara, S. Gabáni, K. Flachbart, H. Fukazawa, Y. Kohori, N. Takeshita, N. Shitsevalova, and H. Ikeda: High-pressure induced modification in the hybridization gap of the intermediate-valence compound SmB₆. *Physical Review B (R)* 93, 121111 (2016).

7. S. Gabáni, M. Orendáč, G. PRISTÁŠ, E. Gažo, P. Diko, S. Piovarči, V. Glushkov, N. Sluchanko, A. Levchenko, N. Shitsevalova, K. Flachbart: Transport properties of variously doped SmB₆. *Philosophical Magazine*, 1 (2016).

8. N. E. Sluchanko, A. L. Khoroshilov, M. A. Anisimov, A. N. Azarevich, A. V. Bogach, V. V. Glushkov, S. V. Demishev, V. N. Krasnorussky, N. A. Samarin, N. Shitsevalova, V. B. Filippov, A. V. Levchenko, G. PRISTÁŠ, S. Gabáni, K. Flachbart: Charge transport in Ho_xLu_{1-x}

xB₁₂: Separating positive and negative magnetoresistance in metals with magnetic ions.

Physical Review B 91, 235104 (2015).

9. S. Gabáni, I. Takáčová, G. PRISTÁŠ, E. Gažo, K. Flachbart, T. Mori, D. Braithwaite, M. Míšek, K. V. Kamenev, M. Hanfland, and P. Samuely: High pressure effect on superconductivity of YB₆, ***Physical Review B*** 90, 045136 (2014).