

Pavel Krtouš

CURRICULUM VITAE

Contacts:

address: Institute of Theoretical Physics
Faculty of Mathematics and Physics, Charles University,
V Holešovičkách 2, 180 00 Prague, Czech Republic
email: pavel.krtous@utf.cuni.cz
ORCID: 0000-0002-7576-1555

Personal data:

Born August 9, 1967, married, one child.

Academic qualifications:

Master studies of theoretical physics, Charles University (1991).
Study stay at the Moscow University (1988, collaboration with D. Gal'tsov).
Ph.D. at the University of Alberta, Edmonton, Canada (1997, supervisor D. Page).
Associate Professor, Charles University (2007).
Professor of Theoretical Physics, Charles University (2017).

Scientific and academic career:

Teaching Assistant (1993–7) at the University of Alberta, Canada.
Assistant Professor (1998–2007), Associate Professor (2008–2017), Professor (since 2018) at the Institute of Theoretical Physics (ITP), Faculty of Mathematics and Physics, Charles University.
Member of the Academic Senate of the Faculty of Mathematics and Physics, Charles University (2008–2016).
Director of ITP (2019–2025).
Member of the Scientific Board of the Centre for Theoretical Studies of Charles University and Czech Academy of Sciences (since 2008).
Member of the Scientific Board of the Faculty of Mathematics and Physics, Charles University (since 2025).

Research:

Active research in general relativity: interpreting exact solutions of Einstein's field equations, particularly solutions with a cosmological constant and generalizations to higher and lower dimensions.
The leading expert in the topic of hidden symmetries of spacetimes.
Interests in quantum theory in curved spacetimes, quantum gravity, and differential geometry.
The global structure of spacetimes with one or more black holes in the presence of acceleration and/or NUT parameters. 2+1 gravity.
Gyratons, a spinning null fluid causing a gravitational response. Self-force of various fields on point source, entanglement entropy in holographic approximation, wormhole spacetimes.

Publications:

60+ publications, INSPIRE: 2100+ citations, H-index 25.

Participation in grants:

Principal investigator of GAČR projects 22-14791S, 19-01850S. Participation in three other grant projects in the past 5 years.

Foreign contacts:

Regular visits at University of Alberta, Edmonton, Canada (collaboration with V. Frolov, A. Zelnikov, and D. Page); visits at Albert-Einstein Institute, MPI in Golm, Germany; DAMTP, University of Cambridge, UK; Perimeter Institute, Waterloo, Canada.

Pedagogical activities:

Courses on classical electrodynamics, special relativity, interpretation of QM, quantum fields on curved background, differential geometry, advanced GR. Active in popularization of science.

Member of the Board for graduate studies in theoretical physics at Charles University (since 2008), vice-chair (2008–2017), chair (2018–2023).

Awards:

Medal of the Ministry of Education for a series of papers on higher-dimensional black holes (2008).