FORM FOR EMPLOYERS

INSTITUTION Institute of Physics of the Polish Academy of Sciences

CITY Warsaw

POSITION Research fellow (adiunkt) in theoretical physics. Postdoc in Theory of Switching Broken Time-Reversal Symmetry Phases Job ID: #JOB 35/2026

DISCIPLINE physics

POSTED 06/11/2026

EXPIRES 30/11/2026

WEBSITE https://www.ifpan.edu.pl/images/instytut/Oferty_pracy_i_konkursy/2026/2026-11-06_Adiunkt_035-2026_EN.pdf

KEY WORDS physics, Theory, Postdoc

DESCRIPTION (field, expectations, comments):

Job Summary:

The postdoctoral researcher will be involved in the theoretical investigation of switching mechanisms in broken time-reversal symmetry phases. The research will explore the evolution of the magnetocrystalline anisotropy of altermagnetic manganese telluride under external stimuli such as pressure and strain.

Job Description:

The research will be carried out in Division ON-6 under the supervision of Prof. Carmine Autieri. The team collaborates with research groups at the Institute of Physics of the Polish Academy of Sciences and with research institutions in Poland and abroad. The project will Focus on theoretical studies of the magnetic properties of α-manganese telluride and β-manganese telluride, with particular emphasis on magnetocrystalline anisotropy and how it can be controlled through pressure and strain. The postdoctoral researcher will analyse the

effects of these factors on the properties of the material and on switching mechanisms between magnetic states. The work will also include exploring interfaces between manganese telluride and superconducting spintronic materials, with a view to potential applications in quantum technologies.

Requirements:

- A PhD in physics.

- Experience in condensed matter theory and quantum information theory, or related fields, demonstrated by publications.

- Experience in analytical and numerical modelling.

- Fluent spoken and written English.

- Ability to work in a team.

What we offer:

- A supportive, friendly, and stable working environment with opportunities for career development, both within Poland and internationally.

- Opportunities to exchange expertise in numerical modelling.

Sub Research Field: Condensed matter physics

Career Stage: Experienced researcher or 4-10 yrs (Post-Doc)

Type of Contract: Temporary, 24 months with possibility of extension

Status: Part-time employment (50% of full-time hours).

Salary: Basic salary of PLN 3 557 per month gross before taxes and applicable social security contributions (approximately 24%), plus length of service allowance. Institute of Physics of the Polish Academy of Sciences

Contact

More information can be obtained from Prof. Carmine Autieri (e-mail: autieri@magtop.ifpan.edu.pl).

Application deadline: 30 November 2026. Later applications will not be considered.

Required materials:

• Curriculum Vitae

• Motivation letter

• List of publications

• Copy of the PhD diploma

• Research plan related to the employment at IP PAS

• Contact data (e-mail) to at least two scientists willing to provide reference letters.

• Consent to process your personal data (expressed on the attached form)

For legal reasons we will not be able to process your application without this!

All materials should be submitted in electronic form to the address: rekrutacja@ifpan.edu.pl with

Job ID in the subject.

We encourage people with disabilities to apply. We provide friendly working conditions.

The Institute of Physics of the Polish Academy of Sciences has Rules for Internal Reports specifying the procedure for reporting violations of law and taking follow-up actions, which can be found on the Institute's website at the link: https://www.ifpan.edu.pl/en/institute/internal-reports-concerning-violations-of-law.html