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HR EXCELLENCE IN RESEARCH

Postdoctoral Researcher (Adjunct) (f/m/x)

Ref Number: MO/30/2026
Location: Warsaw, Poland
Salary range: PLN 15,000–16,000 gross per month (including the seniority allowance)
Employment contract: full-time (1.0 FTE); full social security and health insurance coverage
Number of positions available: 1
Work Arrangement: Hybrid
The position is available from **1 January 2027** at the earliest, initially for **12 months**, with the possibility of extension (subject to satisfactory performance and not beyond the end of the project); full-time employment contract.

Keywords: quantum technologies (e.g. computing and communication), algorithms and complexity, computer and information science, platform-agnostic high-performance computing applications, hybrid quantum–HPC computing, user-centred co-design, one-stop shop, application library, training and capacity building, quantum computing infrastructure

Important Dates:
1. Application deadline: **30 November 2026.**
2. Candidates will be informed about the results **in mid-December 2026.**

Funding Source:
The position is funded under the "Quantum Excellence Centre for Quantum-Enhanced Applications" (QEC4QEA) project (Grant Agreement No. 101194322), co-funded by the European Union under the Horizon Europe research and innovation programme / EuroHPC Joint Undertaking and by the National Centre for Research and Development (NCBR, national co-funding).

About us

The Center for Theoretical Physics of the Polish Academy of Sciences (CTP PAS) is a research institute focused on the study of theoretical physics. The CTP is located in Warsaw, Poland, and was founded in 1980.
The CTP PAS conducts research in various fields of physics, including quantum information, space and gravity research, semiconductors, and atomic gases. The Institute's strategy is to employ the strongest scientists, giving them the freedom to conduct their research. This has resulted in the CTP's high standing in Poland, world-class publications (in Nature and Science), a large number of grants (approximately 30 projects), and participation in international consortia. In terms of

citations per researcher, CTP PAS ranks among the leading institutions in Polish physics.
The CTP PAS also hosts a number of scientific events, including seminars, workshops, and conferences, which are open to the public. The Institute also creates educational content accessible on its official YouTube channel.

About the role

We are seeking a **Postdoctoral Researcher (Adjunct)** (f/m/x) to join the research group at CTP PAS led by Dr hab. Michał Oszmaniec.

The successful candidate should hold a PhD in physics, mathematics, computer science, quantum information, or a related field (confirmed by a diploma or a certificate issued by the degree-awarding institution; applicants who have not yet been formally awarded the degree may participate in the recruitment process, provided they document the current stage of the degree-awarding procedure and obtain the degree before the start of employment) and have a very strong background in theoretical quantum computing and quantum information science. The position is intended for a researcher who can combine analytical work with computational implementation and contribute to the development of methods for current and future quantum computing platforms.

Relevant experience may include quantum algorithms, variational and hybrid quantum–classical methods, quantum simulation, quantum machine learning, applications in quantum chemistry, measurement and tomography protocols, error mitigation, benchmarking, or classical simulation of quantum systems. Experience in probability theory, mathematical physics, many-body systems, quantum optics, or high-dimensional methods will be an additional asset, as will practical programming skills in Python, Julia, C++, Mathematica, or quantum software frameworks.

The postdoctoral researcher is expected to work independently while collaborating closely with members of the CTP PAS quantum computing group and partners in the QEC4QEA consortium. Responsibilities will include developing theoretical methods; implementing and testing algorithms or proof-of-principle software; contributing to open or reusable research code; preparing scientific publications and project documentation; and supporting knowledge exchange within the project. Applicants should have a solid publication record, good communication skills in English, and the ability to present results to both quantum information specialists and interdisciplinary collaborators. We particularly value scientific creativity, reliability, openness to collaborative research, and the ability to adapt theoretical concepts to the realistic constraints of current quantum devices and hybrid HPC-QC workflows.

Enquiries regarding the role or the recruitment process can be addressed to Prof. Michał Oszmaniec (oszmaniec@cft.edu.pl).

If you need reasonable adjustments or a more accessible format to apply for this job online, please contact recruitment@cft.edu.pl.

About you

Essential qualifications, experience and knowledge

- A PhD in physics, mathematics, computer science, quantum information, or a related field.

- Very strong background in theoretical quantum computing and quantum information science.
- Relevant experience in at least one of the following areas: quantum algorithms, variational and hybrid quantum–classical methods, quantum simulation, quantum machine learning, applications in quantum chemistry, measurement and tomography protocols, error mitigation, benchmarking, or classical simulation of quantum systems.

Essential skills and abilities

- Ability to combine analytical work with computational implementation.
- Ability to contribute to the development of methods for current and future quantum computing platforms.
- Very good command of English.

Desirable qualifications, experience and knowledge

- Experience in probability theory, mathematical physics, many-body systems, quantum optics, or high-dimensional methods.
- Practical programming skills in Python, Julia, C++, Mathematica, or quantum software frameworks.

What we offer

- Full-time fixed-term employment contract,
- Salary range: **PLN 15,000–16,000 gross per month (including the seniority allowance)**; the employee is entitled to a seniority allowance upon meeting the conditions set out in the CTP PAS Remuneration Regulations. The employee may also receive bonuses in accordance with those Regulations,
- Scientifically stimulating research environment,
- Friendly and flexible work environment,
- Opportunities to share knowledge and experience,
- Flexible working hours,
- Diverse and inclusive culture where mutual support, teamwork and respect are highly valued,
- Possibility of a MultiSport card subsidy,
- Possibility of a holiday subsidy,
- Possibility of a nursery and kindergarten subsidy.

We will consider applications to work on a part-time and flexible basis wherever possible. We encourage you to discuss your flexible working needs during the interview process.

How to apply

Applications should be sent to recruitment@cft.edu.pl by **30 November 2026**, with the reference number (“**MO/30/2026**”) in the subject line.

Required documents:

1. A Curriculum Vitae describing the applicant’s educational background and any scientific achievements (publications, participation in research projects, conference presentations), including the following clause: “I consent to the processing of my personal data for the purposes necessary to conduct the recruitment process in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR).”

2. Cover letter.
3. A copy of the PhD diploma or an official certificate issued by the relevant degree-awarding institution confirming that the PhD degree has been awarded. Applicants who have not yet been awarded a PhD by the application date must submit a document issued by the degree-awarding institution confirming the current stage of the degree-awarding procedure (e.g. a scheduled dissertation defence date). Proof that the PhD degree has been awarded must be submitted before employment begins.
4. Copies of documents confirming scientific or professional achievements (optional).
5. In addition, the applicant should arrange for two letters of recommendation to be sent directly by independent researchers to recruitment@cft.edu.pl. The letters should assess the applicant and their scientific work to date.
6. A signed Data Privacy Statement (GDPR clause).

Only shortlisted candidates will be contacted.

Shortlisted candidates will be invited to an interview, which will take place at the Center or online.

How we recruit

We carefully review every submitted application. Those whose experience and competencies align with our needs and requirements are invited to an interview (usually held online).
We stay in touch with candidates throughout the entire process, ensuring that interviews take place in a friendly atmosphere, and providing feedback after the interviews. We approach each candidate individually, also considering the needs of people with disabilities.
We appreciate all feedback received after the recruitment process. It motivates us to improve our recruitment efforts.

Our commitment to Equality, Diversity and Inclusion

The CTP PAS operates in an all-inclusive environment irrespective of personal, physical, or social characteristics. Teamwork is highly valued, individual strengths are recognised and appreciated, and we are committed to advancing the careers of everyone.
Equality, respect, and openness are fundamental values in an academic environment, where diversity is essential. We strive to provide a safe and inclusive space for everyone who is part of our scientific community.
The CTP PAS has regulations for reporting violations of law and protection of whistleblowers.