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#### MO/32/2025

#### FORM FOR EMPLOYERS

INSTITUTION: Center for Theoretical Physics, Polish Academy of Sciences

CITY: Warsaw

POSITION: Adjunct/Postdoc

DISCIPLINE: Physics POSTED: 2025-11-26 EXPIRES: 2025-12-23

WEBSITE: https://www.cft.edu.pl

KEY WORDS: Quantum Computer, Integrated Quantum Photonics, Chips, Quantum

Advantage, Detectors, Source of photonic

quantum states

# Adjunct/post-doc (m/f/x)

**Ref Number**: MO/32/2025 **Location**: Warsaw, Poland

Salary: ca. 15000 PLN gross per month Number of positions available: 1 Work Arrangement: In-Person

The role is available from 19 January 2026 at the earliest until 31 December 2026

#### **Important Dates:**

1. Application deadline: 23 December 2025

2. Candidates will be informed about the results by 16 January 2026.

#### Founding Source:

Project EPIQUE is funded by Horizon Europe (contract number:

HORIZON-CL4-2023-DIGITAL-EMERGING-01-CNECT).

Project website: <a href="https://www.quantumepique.eu">https://www.quantumepique.eu</a>.

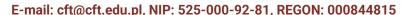
The project is carried on in a dynamic, mixed theoretical and experimental consortium, coordinated by Sapienza University in Rome.

The aim of EPIQUE is to push photonic quantum computing towards a new level of maturity. This project will stimulate technological advances in the various components of a photonic hardware, such as the brightness of quantum light sources, the integration of fast optical operations, the efficiency and time response of single-photon detectors.





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Furthermore, EPIQUE will provide new perspectives for the design and the benchmarking of algorithms tailored for photonic quantum computation. The outcome of the project will be the assembling of three prototypes:

- **QSPACE**, machine encoded in spatial modes and operating with discrete variables:
- **QTIME**, machine encoded in temporal modes and operating with discrete variables;
- **QSQUEEZE**, machine working with continuous variables.

### 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 <a href="YouTube">YouTube</a> channel.

# About the role

We are seeking an adjunct/post-doc, who will join the EPIQUE project group at the CTP PAS, led by Prof. Michał Oszmaniec.

The primary responsibilities include preparing classic simulations for photonic classes of quantum computation and protocol/s of tomography of internal degrees of freedom of photons. Additional duties will include supervising the students working within the Quantum Computating group.





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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

-doctoral degree in physics, mathematics, or information theory

#### **Essential skills and abilities**

-basic knowledge of quantum informational supremacy theory and probability in high-dimensional spaces

#### Desirable qualifications, experience and knowledge

-strong expertise in the fields of quantum computing, quantum information theory, quantum optics and mathematical physics

#### Desirable skills and abilities

-knowledge of current techniques of classical simulation of many-body quantum processes

## What we offer

- 1. Full-time fixed-term employment contract,
- 2. Salary: ca. 15000 PLN (gross) per month,
- The scientifically stimulating research environment,
- Friendly and flexible work environment,
- Sharing knowledge and experience,
- Flexible working hours,
- Diverse and inclusive culture where mutual support, team work and respect are highly valued,
- Multisport card subsidy,
- Holiday subsidy,
- 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: <u>recruitment@cft.edu.pl</u>, by 23 December 2025, with the reference number ("MO/32/2025") in the subject line.





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#### Required documents:

- The scientific CV, including the candidate's academic background, research career to date, and scientific achievements (publications, participation in research projects and conferences), with the clause "I agree to the processing of my personal data contained in the application documents for the purposes necessary for the implementation of the process recruitment by Prof. Michał Oszmaniec".
- Cover letter.
- A copy of the doctoral degree diploma.
- Copies of documents confirming scientific or professional achievements.
- At least one letter of recommendation from a researcher with at least a PhD degree, concerning the candidate and his/her current scientific activity.
- Signed Data Privacy Statement ( RODO rekrutacja eng.pdf ).

Only shortlisted candidates will be contacted.

## 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.

