

## FORM FOR EMPLOYERS

INSTITUTION: **Center for Theoretical Physics, Polish Academy of Sciences**

CITY: **Warsaw**

POSITION: **Research Student (research and technical associate) (f/m/x)**

DISCIPLINE: **Physical Sciences**

POSTED: **2026-06-24**

EXPIRES: **2026-07-24**

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

KEY WORDS: Quantum information theory, Bell non-locality, certification of quantum systems, quantum computin

# Research Student (research and technical associate) (f/m/x)

**Ref Number: MAB/19/2026**

**Location:** Warsaw, Poland

**Salary: 2 512 PLN/month gross** (employment contract: 0.5 FTE; full social security and health insurance)

**Number of positions available:** 1

**Work Arrangement:** Hybrid

Position available as soon as possible, for the period of 12 months, with the possibility of extension.

### Important Dates:

1. Application deadline: 24.07.2026.
2. Candidates will be informed about the results by the end of August 2026.

**Source of financing:** Center for Quantum-Enabled Computing / Centrum Obliczeń Wspomaganych Kwantowo (FENG.02.01-IP.05-M032/25). The project is carried out within the International Research Agendas programme of the Foundation for Polish Science co-financed by the European Union under the European Funds for Smart Economy 2021-2027 (FENG).

## About the project and us



European Funds  
for Smart Economy



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C4QEC

CENTER FOR  
QUANTUM-ENABLED  
COMPUTING



HR EXCELLENCE IN RESEARCH

The *Center for Quantum-Enabled Computing* project's overarching objective is to address several key challenges in the field of computing by paving the way to a verifiable, energy-efficient, reliable, and scalable computational advantage based on quantum systems.

Project's website: <http://c4qec.cft.edu.pl>

Successful candidates will join the Quantum Information and Certification Group led by prof. Remigiusz Augusiak. The research activity of the group is centered on the two goals:

(i) Characterization of quantum correlations, such as quantum entanglement and Bell nonlocality, which are among the most fundamental, if not the most important, resources in quantum information theory. They are used, for example, in the quantum cryptographic key distribution protocols.

(ii) Development of effective tools for certifying and validating the behavior of quantum devices, that is, verifying whether they operate according to specification, truly exploit quantum effects, and produce correct results. This is currently a fundamental challenge in the field of quantum technologies. A key question in this context is whether a given device operates on a specific quantum state and performs the intended quantum operations. Of particular importance is the device-independent approach, which makes no assumptions about the internal workings of quantum devices. In this setting, Bell nonlocality plays a central role as the key phenomenon enabling such certification.

The Center for Quantum-Enabled Computing is a part of the [Center for Theoretical Physics of the Polish Academy of Sciences \(CFT PAN\)](#) which is a research institute that conducts research in various fields of physics, including quantum information, research on the cosmos and gravitation, semiconductors, and atomic gases. The Institute's strategy is to employ the strongest scientists while giving them freedom in conducting research. The result is the high position of CTP PAS PAN in Poland, publications at a world-class level (papers in *Nature* and *Science*), a large number of grants (more than 30 projects), and participation in international consortia.

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 person who will join the newly established Quantum-Enabled Computing Center (within the structures of the Center for Theoretical Physics of the Polish Academy of Sciences) — the first scientific unit in Poland dedicated to the application of quantum effects in computing.

Your responsibilities will include:

- Familiarization with the research lines conducted at the Centre.



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- Realization of tasks stated in the proposal or other tasks stated by the project leader, using both analytical and numerical methods.
- Dissemination of the obtained results (writing articles, presentations on scientific events).
- Participation in the scientific life of the Center (seminars, meetings, etc.).

Researcher's profile according to the European Council's recommendations: R1

You will join the *Quantum Information and Certification Group* led by Remigiusz Augusiak (<http://raugusiak.weebly.com>).

**Keywords:** Quantum information theory, Bell non-locality, certification of quantum systems, quantum computing.

## About you

### Required qualifications, experience, and knowledge

We are looking for talented **students of physics or mathematics holding at least a Bachelor's degree** with a good background in theoretical physics (or mathematics), in particular in quantum physics.

The subject of the project is widely-understood verification and certification of quantum resources. The aim of the position is to familiarize with the subject of the project and then to do research on one of the problems specified by the project leader.

## What we offer

- Opportunity to develop research skills and do research in a fascinating field in a creative, innovative and friendly work environment;
- Development of analytical and numerical skills in the field of quantum information theory;
- Possible collaboration with top institutes in quantum information theory (e.g. ICFO in Barcelona);
- Participation in scientific events (workshops, conferences, etc.);
- Employment on a 0,5 FTE; fixed term employment contract the period of 12 months (with the possibility of extension);
- Remuneration PLN 2 512 gross per month; The indicated amount constitutes the base salary. Additional remuneration components, including bonuses or allowances (e.g. a seniority allowance), may apply in accordance with the Remuneration Regulations in force at the CTP PAS.
- Flexible working hours;
- A diverse and inclusive culture in which mutual support, teamwork, and respect are highly valued;
- Subsidy for a Multisport card;
- Subsidy for leisure activities;



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- Subsidy for nurseries and kindergartens.

## How to apply

Applications should be sent to: [recruitment@cft.edu.pl](mailto:recruitment@cft.edu.pl), by **24.07.2026**, with the reference number ("MAB/19/2026") in the subject line.

The candidates are welcome to inquire about the project details, research agenda and organizational issues. The questions should be sent by email to: [augusiak@cft.edu.pl](mailto:augusiak@cft.edu.pl) (<http://raugusiak.weebly.com>).

### Required documents:

- Curriculum Vitae including the course of studies and possible scientific achievements (publications, participation in research projects, conferences, etc.).
- Candidates are required to hold at least a Bachelor's degree and to provide a diploma or an official certificate confirming the completion of studies and the award of the degree.
- Possible recommendation letter from a senior researcher/lecturer etc, providing an opinion on the candidate and his/her previous scientific activity.
- A document confirming student status, i.e. a current certificate of student status or another equivalent document issued by the university; the candidate must have student status on the date of signing the agreement and throughout its duration.
- Signed Data Privacy Statement ([EN + PL - GDPR clause](#))

Only shortlisted candidates will be contacted.

Shortlisted candidates will receive an invitation for a short interview which will be held 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



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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.



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