Center for Theoretical Physics
Polish Academy of Sciences
Aleja Lotników 32/46, 02-668 Warsaw
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E-mail: cft@cft.edu.pl, NIP: 525-000-92-81, REGON: 000844815

FORM FOR EMPLOYERS

INSTITUTION Center for Theoretical Physics, Polish Academy of Sciences.....

CITY Warsaw.....

POSITION post-doc .....

DISCIPLINE physics.....

POSTED .....2024-12-06.....

EXPIRES …2025-01-07…….

WEBSITE www.cft.edu.pl

KEY WORDS: Quantum technologies, quantum resources, non-locality, quantum entanglement, Bell inequalities, quantum networks, quantum cryptography, quantum communication, quantum many-body systems

DESCRIPTION (field, expectations, comments):

The Director of the Center for Theoretical Physics of the Polish Academy of Sciences (CTP PAS) invites applications for a **post-doctoral position** within the framework of the research project VERIqTAS titled **"Verification of Quantum Technologies, Applications, and Systems,"** funded by the National Science Centre (NSC), project registration number 2021/03/Y/ST2/00175 (Quant-ERA II Call 2021). The project is led by **Prof. Remigiusz Augusiak** (webpage: http://raugusiak.weebly.com).

Project Description

The broad subject of the project is widely-understood verification and certification of quantum resources. There are two main aims. The first one is to characterize quantum resources such as quantum entanglement or non-locality and propose efficient methods of their detection. The second aim is to design certification methods for quantum states, quantum operations etc. in various scenarios typically considered within the field of quantum information such as for instance the device-independent scenario. The research has a fundamental character.

Requirements

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1. A PhD degree in theoretical physics or mathematics, obtained in the year of employment in the project or within seven years prior to January 1 of the year of employment.* (*This period may be extended in cases of official maternity or paternity leave. Please contact us for details.)
2. Proven research experience in quantum information.
3. Strong background in the mathematical methods of physics.
4. Familiarity with convex optimization techniques (e.g., SDP, linear programming) will be considered an advantage.

Terms of Employment

- **Duration**: 14 months, but no later than March 31, 2026.
- **Salary**: Approximately PLN 8,000 net per month (after taxes).

Required Documents

1. **Scientific CV** detailing publications, participation in research projects, and conference presentations, along with the statement:*"I consent to the processing of my personal data for the purposes necessary for 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. **A signed GDPR** consent form (template provided below).
3. **Motivation letter**, including a brief summary of past research achievements and an outline of future research plans.
4. **A copy of the PhD diploma** or a letter from the PhD advisor indicating the planned date of PhD defense. (A PhD diploma must be obtained before signing the employment contract.)
5. **Two letters of recommendation** from senior researchers, evaluating the candidate's scientific qualifications and achievements.

Application Submission

Applications should be submitted via email to **rekrutacja@cft.edu.pl** by **January 7, 2025**, and must include the GDPR consent form. Please mention the reference number **RA/24/2024** in the email subject line.

For further information, contact the project leader at **augusiak@cft.edu.pl**

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Selection Process

Shortlisted candidates will be invited for an online interview. The results will be communicated via email. The final decision is expected to be announced in **January 2024**, subject to candidate availability and interview schedules.

Start Date

The expected start date is **January/February 2025**, with flexibility to agree on an alternative date.

The CTP PAS adheres to the **Internal Regulations for Reporting Violations** and the procedures for handling such reports. These regulations can be found on the Institute's website.

Information Clause – Job Recruitment

Information Obligation under the Article 13 of the RODO *:

1. **Data Administrator**

The administrator who is a deciding entity on how your personal data will be used is the Center for Theoretical Physics PAN represented by the Director with the seat in Warsaw Al. Lotników 32/46. You can contact the Administrator by using one of the contact forms available on the website: : http://www.cft.edu.pl/

2. **Data Protection Inspector**

The Director of the Center for Theoretical Physics of the Polish Academy of Sciences has appointed the Data Protection Inspector (Inspektor Ochrony Danych - IOD) with whom you can contact in all matters relating to your personal data. You can contact the Inspector by sending an email to: iod@cft.edu.pl

3. **The Purposes of Processing and the Legal Basis for Processing**

Your personal data will be processed for the purpose of running the current recruitment.
The basis for the processing of personal data are the provisions of the Labor Code Act of June 26, 1974 (uniform text: Dz. U. of 2018, item 917) and based on your consent for data processing.

4. **The Period of Storage of Personal Data**

Your personal data will be kept for the duration of the present recruitment.

5. **Data Recipients****

The recipients of your personal data will be only entities authorized to obtain personal data on the basis of the law. Access to your data is provided only to employees authorized by the administrator and associates who must have access to the data to perform their duties.

6. **Your Processing Rights**

You have the right to access your data and the right to correct it or limit processing, as well as the right to appeal against the processing.

7. **The Obligation to Provide Data and the Consequences of not Providing Data**

Providing your personal data specified in the Labor Code is obligatory, and for the remaining extent voluntary.

8. **The right to make a complaint to the President of the Office for the Protection of Personal Data**

When you feel that the processing of personal data violates the provisions of the general regulation on the protection of personal data, you have the right to make a complaint to the President of the Office for the Protection of Personal Data.

Consent to Data Processing

I consent to the processing of my personal data by the Center for Theoretical Physics PAN for the needs of:

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☐ Present recruitment.

I provide the data voluntarily and I declare that they are truthful. I got acquainted with the contents of the above information, including information about the purpose and methods of processing personal data and the right to access my data and the right to correct them.

.....

date, signature of the candidate

* Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46 / EC (general regulation on data protection)