

FORM FOR EMPLOYERS

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

CITY Warsaw.....

POSITION post-doc

DISCIPLINE physics.....

POSTED2024-05-23.....

EXPIRES ...open until filled.....

WEBSITE www.cft.edu.pl

KEY WORDS: decoherence mitigation; quantum algorithms; system-environment entanglement

DESCRIPTION (field, expectations, comments):

The Director of the Center for Theoretical Physics PAS invites applications for **one** postdoctoral fellowship at the CTP PAS, financed from the project “**Quantum Coherence Activation By Open Systems and Environments**” **QuCABOoSE**, financed by the National Science Center (NCN) - registration No. 2023/05/Y/ST2/00139 (Quant Era). PI of the project is dr hab. Jarek Korbicz.

We are looking for a candidate with a **recognized PhD degree (obtained not earlier than in 2017)** and a solid background in **quantum information theory**, especially in **quantum algorithms and protocols, quantum correlations, quantum error correction**. Basic knowledge of the theory of **open quantum systems** will be an additional advantage. The project is carried on in a dynamic, mixed theoretical-experimental consortium, which, apart from CFT PAN, includes University of Paderborn, Dortmund Technical University, Czech Academy of Sciences in Prague and Italian National Agency for New Technologies (ENEA) in Rome. The main scientific topic of the project is an innovative approach to the role of the environment in quantum algorithms. It combines the theories of quantum correlations and quantum algorithms on one hand, and the dynamics of open quantum systems on the other. The aim of the project is to investigate the possibility of activating quantum correlations through a fully quantum treatment of the environment and to develop novel mechanisms for

decoherence suppression/reversal. This is crucial for the development of quantum technologies. As part of the project, there is a **chance to work on the IBMQ quantum computer**. The position offered is for a period of one year with the possibility of extension; the earliest date of starting work is July 2024. **The salary is PLN 9,770/month gross (approx. PLN 7,500/month net).**

The application must include:

1. The scientific CV, including publication list, participation in research projects and conferences (with the clause *"I consent to the processing of my personal data necessary for the recruitment process in accordance with the Regulation of the European Parliament and of the Council (EU) 2016/679 of April 27, 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. *Signed RODO clause.*
3. Motivation letter, with a brief description of the Candidate's scientific interests and future research plans.
4. A copy of the PhD diploma, or statement from the PhD Advisor on the planned date of defense (the PhD should be awarded before the post-doc contract starting date).
5. Applicants should also arrange to have two letters of reference separately sent to the email address given below.

The documents should be sent electronically to rekrutacja@cft.edu.pl. **In the title of the e-mails please add the reference number: JK/08/204.** The recruitment is open until the position is filled.

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:

- 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)