

JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics (quantum information theory)
Job type:	Stipend
Number of job offers:	2
Stipend amount/month	4000 PLN
Position starts on:	Negotiable, preferably from June 2018
Maximum period of contract/stipend agreement:	Until April 2021
Institution:	Center for Theoretical Physics (Polish Academy of Sciences)
Project leader:	Remigiusz Augusiak (http://raugusiak.weebly.com)
Project title:	<i>Self-testing protocols for multipartite quantum states</i> <i>Project is carried out within the First Team programme of the Foundation for Polish Science</i>
Project description:	<p>The rapid development of quantum technologies creates an urgent need to design methods to certify whether quantum devices really operate in a non-classical way. The main aim of this project is to respond to this need. We will provide efficient and robust protocols of self-testing—a device-independent certification method—for multipartite entangled quantum states. To reach this goal we will study and explore the phenomena of Bell nonlocality and entanglement in the multipartite scenario.</p> <p>The project will be realized in collaboration with ICFO – the Institute of Photonic Sciences in Barcelona (the groups of prof. A. Acin and M. Lewenstein) and National Centre for Quantum Information in Gdańsk (the group of prof. M. Horodecki).</p>
Key responsibilities include:	<ul style="list-style-type: none">⑩ Realization of tasks stated in the proposal or other tasks states by the project leader, using both analytical and numerical methods⑩ Work on a PhD thesis based on the results obtained within the project⑩ Dissemination of the obtained results (writing articles, active participation in scientific events)⑩ Participation in the scientific life of the institute

Profile of candidates/requirements:	<ul style="list-style-type: none"> ⑩ MSc degree in physics or mathematics ⑩ High interest in quantum information theory, high motivation for scientific work, and a wish to complete a PhD thesis in physics in our institute ⑩ Good knowledge of quantum theory ⑩ Good level of programming skills
Required documents:	<ul style="list-style-type: none"> ⑩ Cover letter ⑩ Curriculum Vitae ⑩ Transcript of records from the master studies ⑩ Certified copy of the MSc diploma ⑩ Two recommendation letters from senior researchers
We offer:	<ul style="list-style-type: none"> ⑩ Opportunity to do research in a fascinating field in a creative, innovative and friendly work environment ⑩ Development of analytical and numerical skills in the field of quantum information theory ⑩ Close collaboration with top institutes in quantum information (ICFO in Barcelona and NQIC in Gdańsk) ⑩ Support in application for additional funding and scholarships ⑩ Participation in scientific schools and conferences
Please submit the following documents to	Dr. Remigiusz Augusiak, e-mail: augusiak@cft.edu.pl
Application deadline:	May 17, 2018
For more details about the position please visit:	http://www.cft.edu.pl/ http://raugusiak.weebly.com Selected applicants will be invited for an interview which will be held either at the institute or via Skype.
Euraxess job/stipend offer:	https://euraxess.ec.europa.eu/jobs/298272

Please include in your offer:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”