

JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics (quantum information theory)
Job type:	Stipend
Number of job offers:	1
Stipend amount/month	4000 PLN (no taxable)
Position starts on:	Negotiable, preferably from September/October 2018
Maximum period of contract/stipend agreement:	until April 2021 (extendable to 3 years)
Institution:	Center for Theoretical Physics (Polish Academy of Sciences)
Project leader:	Dr. 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">• Realization of tasks stated in the proposal or other tasks states by the project leader, using both analytical and numerical methods• Work on a PhD thesis based on the results obtained within the project• Dissemination of the obtained results (writing articles, active participation in scientific events)

	<ul style="list-style-type: none"> • Participation in the scientific life of the institute
Profile of candidates/requirements:	<ul style="list-style-type: none"> • MSc degree in physics or mathematics • High interest in quantum information theory, high motivation for scientific work, and a wish to complete a PhD thesis in physics in our institute • Good knowledge of quantum theory • Good level of programming skills
Required documents:	<ul style="list-style-type: none"> • Cover letter • Curriculum Vitae • Transcript of records from the master studies • Certified copy of the MSc diploma • Two recommendation letters from senior researchers • Personal questionnaire form <p>(http://www.cft.edu.pl/upload/kwquestionariusz_osobowy.pdf)</p>
We offer:	<ul style="list-style-type: none"> • Opportunity to 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 • Long-term visits to top institutes in quantum information (ICFO in Barcelona and NQIC in Gdańsk) • Support in application for additional funding and scholarships • Participation in scientific schools and conferences
Please submit the following documents to	<p>e-mail: rekrutacja@cft.edu.pl</p> <p>In your e-mail subject please include ref. no RA/4/2018</p> <p>Selected applicants will be invited for an interview which will be held either at the institute or via Skype.</p>
Application deadline:	August 22, 2018
For more details about the position please contact:	<p>Dr. Remigiusz Augusiak (e-mail: augusiak@cft.edu.pl)</p> <p>http://raugusiak.weebly.com</p>
Euraxess job/stipend offer:	

In your cover letter or e-mail please include the following statement:

“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.”

The data administrator is the Center for Theoretical Physics of the Polish Academy of Sciences, Warsaw, Al. Lotników 32/46. The data contained in the application documents will be processed for the purpose of running the current recruitment. Each job candidate has the right to inspect his or her data and to correct them. Data submission is voluntary, but necessary to take part in the recruitment.