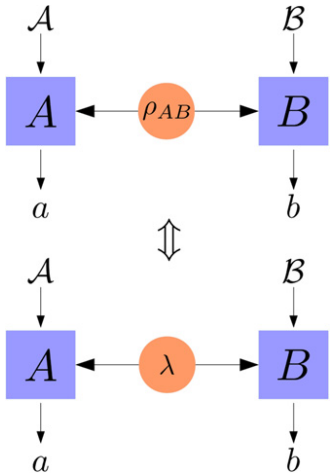
Postdoctoral position at the
Center for Theoretical Physics (Polish Academy of Sciences)

Project:
"**Self-testing protocols for multipartite quantum states**" within the First Team grant from the Foundation for Polish Science. The project will be realized at the Center for Theoretical Physics PAS in Warsaw (Poland). The project is led by **dr. Remigiusz Augusiak** (http://raugusiak.weebly.com/).



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.

The project will be realized in close collaboration with **ICFO—The Institute of Photonic Sciences in Barcelona** (the groups of profs. A. Acin and M. Lewenstein) and **National Quantum Information Centre** in Gdańsk (the group of prof. M. Horodecki).

Candidate's profile:
- PhD in theoretical physics (closely related to quantum information theory) obtained in 2013 or later
- Interest and experience in quantum information theory and high motivation for scientific work
- Very good English skills
- Enthusiasm for work with PhD students
- Good level of programming skills and good knowledge of quantum theory

Application should include:
- Cover letter
- Curriculum Vitae including a list of publications and short description of the most important scientific achievements
- Certified copy of the PhD diploma
- Two recommendation letters from senior researchers

Candidate should expect:
- Work contract with monthly remuneration of around **8500 PLN** (**2030 euro**) net for **a year** with the possibility of extension to April 2021
- Research in a fascinating field in a creative, innovative and friendly work environment
- Development of analytical and numerical skills in quantum information theory
- Intensive collaboration with ICFO-The Institute of Photonic Sciences (Barcelona, Spain) and the National Quantum Information Centre (Gdańsk, Poland) which includes visits to both institutes
- Participation in scientific events (schools, workshops and conferences)

How to apply:
Applications should be submitted to Remigiusz Augusiak by e-mail (augusiak@cft.edu.pl) not later than May 17, 2018. All applicants are encouraged to contact Remigiusz Augusiak prior to the application.

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