

Open PhD position in Non-Gaussian Entanglement of Light and Atoms

Fri, 2017-12-01 16:20 - [Radim Filip](#) [1] **At:** Department of Optics, Palacky University, Olomouc, Czech Republic

Deadline: 31 January, 2018

Location

Department of Optics, Palacky University, Olomouc, Czech Republic 17. listopadu 12
Olomouc 77900 Czech Republic

Open PhD position in Non-Gaussian Entanglement of Light and Atoms

Department of Optics, Palacky University, Olomouc, Czech Republic

Start: at any time before September 1, 2018

End: June 1, 2022

We are seeking a PhD student in theoretical quantum optics and quantum engineering, specifically, for a running EU QUANTERA project on quantum solid-state emitters and atoms generating a quantum non-Gaussian entangled states.

The theoretical work of PhD student will be focused on (i) analytical formulation and numerical simulation of quantum dynamics for different experimental platforms, including both individual atoms and emitters and collective ensembles, (ii) identification of non-Gaussian entanglement by available detection techniques (iii) development of applications in quantum communication and metrology. Theoretical proposals will be developed towards possible experimental tests in collaboration with labs. Our research runs in a friendly, collaborative and very international academic environment, including theoretical and experimental physicists in quantum optics, quantum communication, quantum optomechanics, quantum thermodynamics, physics of trapped ions and particles, theoretical and experimental quantum information and classical optics. PhD study will be in collaboration with a senior PhD student and a postdoc.

Position summary: Full-time temporary employment. The PhD study is limited to a maximum of four years. A short extension is conditionally possible. Salary is monthly 22.000-28.000 CZK before tax and social/health insurance.

Required:

- Master Degree in Physics, Applied Physics, Applied Mathematics, or equivalent
- fluency in English, oral and written

Important experience:

- quantum physics

Helpful experiences:

- quantum optics, quantum information

Contact Prof. Dr Radim Filip ([filip \[at\] optics \[dot\] upol \[dot\] cz](mailto:filip[at]optics[dot]upol[dot]cz) [2]) directly by email. Include CV, one

Open PhD position in Non-Gaussian Entanglement of Light and Atoms

Published on QUROPE (<http://qurope.eu>)

reference letter and Master thesis, if available. The application deadline is January 31, 2018. However, an extension is possible if no candidate is accepted. Apply immediately.

Contact person: Prof. Dr. Radim Filip, [filip \[at\] optics \[dot\] upol \[dot\] cz](mailto:filip[at]optics.upol[dot]cz) [2], <http://muj.optol.cz/filip/> [3]

- [PhD](#) [4]

Source URL:

<http://qurope.eu/db/jobs/open-phd-position-non-gaussian-entanglement-light-and-atoms>

Links:

[1] <http://qurope.eu/users/radim-filip>

[2] <mailto:filip@optics.upol.cz>

[3] <http://muj.optol.cz/filip/%C2%A0>

[4] <http://qurope.eu/db/jobs/type/phd>