



## POSTDOC

We are seeking candidates for the postdoctoral researcher position in the project of the National Centre of Science, Poland entitled „*Nondemolition quantum-state tomography and spin-interaction detection*” realized at the Institute of Physics of the Jagiellonian University in Kraków, Poland

### ■ We offer:

- Cutting-edge research in exciting field of quantum-state engineering and tomography
- Access to the world-class experimental apparatus, enabling research using hot atomic vapor
- Work in dynamic, creative, interdisciplinary international group of researchers
- Broad international collaboration
- Two-year full-time employment: ~8000 PLN/month and all benefits

### ■ Responsibilities:

- Leading theoretical investigations, including:
  - studies of fundamental limitations of the collective density-matrix approach
  - developing protocols for a quantum-state tomography
- Performing simulations of many-body quantum systems
- Close collaboration with other members of the group on planning experiments and data processing

### ■ Requirements:

- Good track record confirmed by a solid publication record
- Experience in atomic, molecular or optical physics research
- Ability to collaborate in international group
- Creativity, independence, self-discipline

### ■ Document required for application:

- CV including the publication list
- Motivation letter
- Two reference letters of faculties/senior scientists

Documents submit to Szymon Pustelny ([pustelny@uj.edu.pl](mailto:pustelny@uj.edu.pl))

**Application deadline: 31 July 2021**

*Employment starts 1 October 2021*

More information on S. Pustelny group research available at [www.zf.if.uj.edu.pl](http://www.zf.if.uj.edu.pl) and [www.facebook.com/ExcitingAtomees/](https://www.facebook.com/ExcitingAtomees/) or after contacting group leader ([pustelny@uj.edu.pl](mailto:pustelny@uj.edu.pl))