

The Faculty of Science and the Leiden Institute of Physics invite applications for a

Tenure track faculty position in theoretical physics focused on quantum algorithms

Job description

The [Leiden Institute of Physics](#) is searching a new faculty member for the [Applied Quantum Algorithms](#) group, a joint initiative with the [Leiden Institute of Advanced Computer Science](#). We seek candidates who can contribute to the national [Quantum Delta NL](#) program in quantum technology, by the development and application of quantum algorithms to problems in physics, chemistry, and computer science.

We offer a tenure track appointment as assistant professor that upon successful performance will lead to promotion to a tenured position as associate professor and upon continued growth to promotion to full professor. (In exceptional cases, initial appointment at a higher level is possible.) We offer a clear and inviting career path, support in the development of your personal and professional skills, and an attractive start-up package. We actively support learning Dutch through departmentally funded courses.

Embedding

Locally the position will be embedded in the [Lorentz Institute for theoretical physics](#), with a diverse research agenda in condensed matter physics, complex systems, and cosmology. Nationally we are a partner of the [Quantum Software Consortium](#), a multidisciplinary group of researchers from the universities of Amsterdam, Leiden and Delft, with backgrounds in computer science, mathematics, engineering, and physics. We are one of the five research hubs of the [Quantum Delta NL](#) program for the development of quantum technology. We share students and postdocs with [QuTech](#) in Delft, where we can try out ideas on quantum hardware. The Lorentz Institute is affiliated with the [Lorentz Center](#), which hosts workshops on topics of current interest and helps create a stimulating research environment.

Key responsibilities

- Establish an independent, internationally recognized research line in quantum information science and technology;
- Acquire external funds through research grants and/or industrial collaborations;
- Teach at the undergraduate and graduate level in physics;
- Supervise MSc and PhD students in their thesis work;
- Contribute to the inclusive atmosphere, management and organization of the institute.

Selection criteria

- PhD degree in physics and research experience at the postgraduate level;
- Demonstrated strong interest in an academic career through activities and publication record;
- Excellent communication skills in English, both written and verbal;
- Strong commitment to teaching and willingness to further develop teaching skills.

Application

For full consideration we encourage candidates to apply before 1 November 2021, later applications will be reviewed until the position is filled. We particularly welcome applications from women and minorities. Please contact Carlo Beenakker beenakker@ilorentz.org for information and to apply. We would need a cover letter, a CV with a link to your publication list, a research plan, and names of three persons who can be contacted for a reference.

Please note: The applied quantum algorithms initiative at Leiden University has **two** openings: one embedded in the physics department and another embedded in the computer science department. See [this link](#) for the announcement of the other opening.