

## Postdoctoral Researcher in Theoretical Quantum Mechanics with a Focus on Ultracold Atoms/Quantum Many-body Physics/Quantum Thermodynamics

The [Quantum Systems Unit](#), headed by Prof. Thomas Busch, at OIST Graduate University in Okinawa Japan, has currently an opening for several **post-doctoral researchers** in the area of theoretical quantum mechanics with a focus on one or several of the following areas

- Ultracold Quantum Gases
- Quantum Many-body Dynamics
- Quantum Thermodynamics

Candidates should have a Ph.D. in theoretical physics or a related discipline, be comfortable working in English, and have demonstrated a creative and independent-minded approach to research.

Knowledge and an interest in one or more of the following areas are of advantage:

- atomic Bose-Einstein condensates
- BEC-BCS transition in ultracold Fermi gases
- numerical approaches to strongly correlated dynamics in ultracold gases (DMRG, MC, advanced ED,...)
- quantum engines and quantum batteries

### Compensation and benefits:

Successful candidates can expect competitive salary and significant benefits, including annual paid leave, summer holidays, Private School Mutual Aid, housing allowance, commuting allowances and relocation allowances.

### Term:

The appointment is initially for two years with the possibility of renewal for one additional year, contingent on satisfactory performance.

### Starting Date:

From January 2025

### Application Due Date:

31 August 2024, however applications might be considered as soon as they arrive

### Application materials:

Letters of application, containing a CV, a short statement of research interests and contact information of a minimum of two referees should be sent to [thomas.busch@oist.jp](mailto:thomas.busch@oist.jp). Any information provided by applicants will be kept confidential.

### OIST

The Okinawa Institute of Science and Technology (OIST) Graduate University is a model for change in education and research with the best international graduate students, working side by side with world-class faculty in modern well-equipped laboratories. Beautifully situated on the island of Okinawa in Japan, OIST relies on a cross-disciplinary approach, with an emphasis on creativity and exchange, to offer unique, individualized graduate and post-doc training. OIST is a university with no departments, eliminating artificial barriers between people working in different fields, but many nationalities, with students and faculty being attracted from all over the world. OIST is bringing some of the best brains in the world to Okinawa to transform the way science and education is done in the global academic world.

OIST is an equal opportunity employer and encourages applications from women.