

With over 6,900 employees in research, teaching and administration and its unique profile, TU Dortmund University is shaping future perspectives: The interplay of engineering and natural sciences, social and cultural sciences drives technological innovations as well as advances in knowledge and methods, from which not only the 32,500 students benefit.

TU Dortmund University has a vacancy to be filled in the Professorship Ultracold Reactions in the Department of Physics for an initial period of 6 months for 8 hours per week as

**Student Assistant (f/d/m) with**

the prospect of extension.

Remuneration is in accordance with the guidelines for student assistants at TU Dortmund University.

**Your tasks:**

Participate in the design and construction of a new experiment to bring molecules to the lowest temperatures ever achieved. New physics with strongly interacting many-body systems.

Possible projects:

1. Simulation of a novel superconducting molecular slower.
2. As directed, assist in the construction of a prototype superconducting coil of high temperature superconductors and characterize its performance for deceleration application.
3. Under supervision of scientific staff members, participate in the construction of a laser system for the detection of ultracold molecules and atoms and the manipulation of quantum states.

**What we would like you to bring along:**

- curiosity, independence, motivation
- very good communication skills
- very good command of English

**What we offer you:**

- You learn about modern techniques in atomic and molecular physics, including laser cooling of atoms and molecules, magnetic deceleration, and trapping.
- You get to know ultra-high vacuum technology and cryogenics.
- You will gain experience with modern laser applications and manipulation of matter at the single quantum state level. We develop our own electronics and you will gain experience in digital and analog design.
- Collaboration in an international English-speaking team
- Employment of approx. 8 hours per week or more by arrangement

Please send your brief application preferably by e-mail as one pdf document by 30 June 2025 to

TU Dortmund University  
Professorship Ultracold Reactions  
Prof. Edvardas Narevicius  
Otto-Hahn-Str. 4a  
D-44227 Dortmund  
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More information on the Professorship Ultracold Reactions can be found here:

[www.amo.physik.tu-dortmund.de](http://www.amo.physik.tu-dortmund.de)

If you have any questions, please feel free to contact:

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Dortmund, 27 May 2025