

Hier  
entsteht  
Zukunft!



UNIVERSITÄT  
DES  
SAARLANDES

Foto: Uwe Bollhäuser

Saarland University is a campus university that is internationally recognized for its strong research programmes. Fostering young academic talent and creating ideal conditions for teaching and research are a core part of the university's mission. As part of the University of the Greater Region, Saarland University enables students and staff to share and exchange knowledge and ideas between disciplines, between universities and across borders. With over 17,000 national and international students, studying more than a hundred different academic disciplines, Saarland University is a diverse and dynamic learning environment. [Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4,000 it is one of the largest employers in the region.]

The Quantum Information and Matter Group led by Prof. Peter P. Orth in the Department of Physics is inviting applications for the following position commencing 01 June 2025 at the earliest, although a later starting date can be discussed.

## Academic research assistant (m/f/x)

**Reference number W2617**, salary in accordance with the German TV-L salary scale<sup>1</sup>, pay grade: E13 TV- L, duration of employment: initial appointment is for 3 years with a possible extension by another year, volume of employment: 65 % of standard working time.

### Workplace/Department:

Department of Physics, Faculty of Natural Sciences

### Job requirements and responsibilities:

We are looking for a motivated student with a Master's Degree in Physics, Quantum Engineering, Quantum Information Science (or related fields) to join the Quantum Information and Matter Group headed by Prof. Peter P. Orth at Saarland University, which offers a unique interdisciplinary research environment in quantum information science with groups in computer science, mathematics and physics. The successful applicant will conduct research at the interface of quantum information science and condensed matter theory. Specific research directions include quantum algorithms for the simulation of quantum materials and many-body systems. A focus lies on the implementation of these algorithms on current noisy intermediate-scale and near-term early fault-tolerant quantum hardware including the development and use of quantum error mitigation and quantum error correction methods. The research entails both analytical and numerical work. The successful candidate will have excellent verbal and

<sup>1</sup> TV-L = collective agreement on remuneration of public sector employees in the German *Länder*

The pay grade assigned to an employee depends on their professional qualifications and the number of years of service. Each pay grade is further subdivided into levels. Entry-level employees with no previous experience will initially be assigned a level 1 rating. After one year at level 1 of the E10 pay grade, an employee will move up to level 2. After a further two years, the employee will move to level 3, etc.

written communication skills in English or German and will be able to communicate effectively to a wide variety of audiences. The individual must be able to work effectively with team members.

#### **Your academic qualifications:**

- Completed university studies in Physics, Quantum Engineering, Quantum Information Science (or a related field) (Master's degree)
- Language skills (according to GER): German C2 OR English C2

#### **The successful candidate will also be expected to:**

- Have successfully completed coursework related to the study of quantum information science and/or condensed matter physics and/or materials science
- Have first research experience in these fields
- Strong analytical and/or numerical skills in techniques suited for the study of quantum many-body systems
- Strong verbal and written communication skills in English or German

#### **What we can offer you:**

- A flexible work schedule allowing you to balance work and family, among other things the possibility of teleworking
- Secure and future-oriented employment with attractive conditions
- A broad range of further education and professional development programmes (for example language courses)
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Job-Ticket Plus' of the saarVV)

We look forward to receiving your **meaningful online application** (in a PDF file) by **31.03.2025** to **peter.orth@uni-saarland.de**. Please include the reference number **W2617** in the subject line of the e-mail. Please include a motivated cover letter (max. 1 page), a Curriculum vitae including information about your education, experience, language skills and other skills relevant for the position, and contacts of two references.

If you have any **questions**, please contact us for assistance. Your contact:

Herr Prof. Peter Orth  
Theoretical Physics  
peter.orth@uni-saarland.de

Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale. Part-time employment is generally possible.

If you have obtained a foreign university degree, a proof of the equivalence of this degree with a German degree by the Zentralstelle für ausländisches Bildungswesen (ZAB) is needed before hiring. If necessary, please apply for this in time. You can find more information at <https://www.kmk.org/zeugnisbewertung>.

Unfortunately, neither costs for attending an interview at Saarland University nor costs for any certificate evaluation by the ZAB can be reimbursed in principle.

We welcome applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. In accordance with its policy of increasing the proportion of women, the University actively encourages applications from women. Applications from severely disabled persons will be given preferential consideration in the event of equal suitability.

When you submit a job application to Saarland University you will be transmitting personal data. [Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung](#). By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.