JARA Jülich Aachen Research Alliance

RWTH AACHEN UNIVERSITY

JÜLICH Forschungszentrum

The Jülich Aachen Research Alliance (JARA) is an innovative cooperation model between RWTH Aachen University and Forschungszentrum Jülich.

RWTH Aachen University is one of Germany's pre-eminent Universities of Excellence and is renowned for its high-quality teaching and world-class research. Assuming profound responsibility towards society, RWTH addresses bold scientific questions and translates its knowledge into meaningful applications. In a dynamic, creative, and international environment, RWTH develops solutions to tackle both current and future challenges.

Forschungszentrum Jülich is a magnet for outstanding scientists, young talents, and management professionals. As a member of the Helmholtz Association, we tackle grand societal challenges and conduct research for a digitized society, a climate-friendly energy system, and a resource-efficient economy. We are passionate about excellence and our open campus inspires collaboration between people from all over the world. Join more than 7,450 staff members in one of Europe's largest interdisciplinary research centers and help us shape change!

Joint appointment of a full professor (W3) at Forschungszentrum Jülich and RWTH Aachen University

Director (f/m/x) at the Peter Grünberg Institute – Quantum Theory of Materials – PGI-1 at Forschungszentrum Jülich

in line with the Jülich model to be appointed as

Full Professor (W3) (f/m/x) for Theory of Quantum Materials RWTH Aachen University – Faculty of Mathematics, Computer Science and Natural Sciences

The place of work will be Jülich.

We are seeking an outstanding individual with the ability to lead a large cutting-edge institute in the field of theoretical and computational materials physics research. Its focus lies on quantum and functional materials that are relevant for fundamental research and practical applications for emerging beyond von Neumann computing paradigms with avenues for molecular, superconducting, semiconducting, and topological as well as spintronic and memristive devices.

The ideal candidate would lead dynamic research in materials simulations, developing and applying a range of methodologies. Current strengths of the institute are to be continued. These include density functional theory and many-body techniques, transport and response theory, atomistic and molecular spin dynamics, high-throughput and high-performance computing. Additional areas of interest include, but are not limited to, artificial intelligence-enhanced and quantum computing-based materials design, as well as nonequilibrium phenomena.

The new director should strategically spearhead the field of materials for information processing and computing. Close interactions within the PGI and with other institutes of Forschungszentrum Jülich and RWTH Aachen University in areas of novel quantum materials, emergent phenomena, and device-relevant properties are explicitly encouraged. The candidate will benefit from access to local cutting-edge high-performance computing, artificial intelligence and quantum computing infrastructures and by joining the Jülich Center for Advanced Simulation and Analytics as well as the Jülich Quantum Computing and Neuromorphic Computing Alliances.

The institute will be part of the Jülich Aachen Research Alliance, and the Chair will be affiliated to the Faculty of Mathematics, Computer Science and Natural Sciences of the RWTH Aachen University in a W3 full professor position according to the Jülich model. The institute participates in the Excellence Cluster Matter and Light for Quantum Computing (ML4Q) and is part of the EU co-funded Center of Excellence MAX – Materials Science at the eXascale.

Requirements include a university degree, a doctoral degree, and additional research experience, e.g., evidenced through a habilitation (post-doctoral lecturing qualification), or equivalent accomplishments as a university researcher or junior professor or in a research position in a university, a research institution, in industry, administration, or in another societal setting. The candidate should bring the ability to manage and lead a large interdisciplinary and diverse institute division. Furthermore, good teaching skills are expected. The application should include the usual supporting documents (CV, certificates, list of publications, teaching experience, brief summary of previous research activities, including details of third-party funding, and a research proposal for the position advertised).

Applications should be addressed to Prof. Carsten Honerkamp, Dean of the Faculty of Mathematics, Computer Science and Natural Sciences at RWTH Aachen University, and to Prof. Dr. Laurens Kuipers, Member of the Board of Directors of Forschungszentrum Jülich. Please submit your application online by September 30, 2025, through the RWTH appointment portal: www.berufungsportal.rwth-aachen.de.

We welcome applications from all qualified candidates, regardless of gender. RWTH Aachen University and Forschungszentrum Jülich are recognized as family-friendly institutions and provide dual career programs to support partner hiring. We are dedicated to advancing women's careers and strongly encourage women to apply. When candidates have equal qualifications, skills, and accomplishments, preference may be given to women, provided there are no overriding considerations in favor of another candidate. We also welcome applications from qualified individuals with disabilities and those with equivalent status, and we look forward to applications from international candidates. For further information on joint applications, visit https://go.fzj.de/appointments.