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, which entails the highest quality in teaching and world-class research. RWTH addresses bold scientific questions; it also assumes a profound responsibility toward society and transfers 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 member of the Helmholtz Association and conducts research in the fields of information, energy, and bioeconomy on a climate-friendly energy system, a resource-efficient economy, and a digitized society. To this end, Jülich combines its competences in natural, engineering, and life sciences with its unique expertise in high-performance computing, and utilizes its unique scientific infrastructure. More than 7,100 colleagues at one of Europe's largest research centres work for a changing society: be part of it!

The Jülich Centre for Neutron Science (JCNS) uses neutrons as microscopic probes to study condensed matter and biological systems. To this end, JCNS – in cooperation with the Central Institute of Engineering, Electronics and Analytics (ZEA) – develops and operates neutron scattering instruments at leading national and international neutron sources. JCNS uses these instruments for its own research and offers access to them for a large national and international scientific community. Research at JCNS focuses on three areas of interest: (i) soft matter and biophysics (JCNS-1), (ii) quantum materials and collective phenomena (JCNS-2), and (iii) neutron analytics for energy research (JCNS-3). JCNS plays a key role in unlocking new opportunities for research with neutrons at the future European Spallation Source (ESS). With the strategic objective of contributing to a rejuvenation of the European neutron ecosystem, JCNS is involved in the high-brilliance neutron source (HBS) project that aims to establish a novel neutron research facility.

The Peter Grünberg Institute (PGI) conducts research into the physics of information processing, and quantum materials and functional materials form a crucial basis. PGI-4 makes a key contribution here using scattering methods.

Joint professorial appointment at Forschungszentrum Jülich and RWTH Aachen University:

Director (f/m/x) at the Jülich Centre for Neutron Science and Peter Grünberg Institute – Quantum Materials and Collective Phenomena (JCNS-2 / PGI-4) Forschungszentrum Jülich

in line with the Jülich model to work at Jülich and simultaneously be appointed as

Full Professor (W3; f/m/x) for Neutron Scattering in Solid State Physics RWTH Aachen University – Faculty of Mathematics, Computer Science and Natural Sciences

We are seeking an outstanding individual from science to head JCNS-2 / PGI-4 at Forschungszentrum Jülich, and to take on responsibility for and further develop teaching and research in the field of experimental physics and in particular neutron scattering in solid state physics. The position will be available from September 1, 2023. The applicant's research programme should address current issues in solid state physics, quantum materials, such as magnetic and functional material systems, as well as the development and operation of novel instruments for neutron scattering, imaging, and analytics. To this end, the high-brilliance neutron source (HBS) project offers excellent future prospects for research with neutrons. The professorship will act as a bridge between RWTH Aachen University and Forschungszentrum Jülich. The teaching activities within the scope of the physics study programmes at RWTH Aachen University will help to establish contact with excellent early-career scientists.

The applicant's work to date will be of a high scientific quality, and they should be able to demonstrate this, for example by publications in highly ranked journals. Experience in heading publicly funded large-scale projects is also desired. The successful candidate will be capable of establishing, maintaining, and efficiently utilizing collaborative networks both internally and externally, starting from an independent scientific and methodological point of origin. Excellent integration and communication skills in a scientific and political environment are essential, particularly with regard to the impact of research on society.

Research activities at JCNS-2 / PGI-4 are conducted in close collaboration with the other groups at JCNS and PGI, as well as with other relevant research units at Forschungszentrum Jülich. A collaborative approach to research and teaching is also expected with the Faculty of Mathematics, Computer Science and Natural Sciences at RWTH Aachen University. The professor will be associated with the Physics Department at RWTH Aachen University, and will be actively incorporated into JARA-FIT (Fundamentals of Future Information Technology) and the profile areas of RWTH Aachen University (in particular, Materials Sciences and Engineering [MatSE]), as well as into the "Matter and Light for Quantum Computing (ML4Q)" Cluster of Excellence.

Applications should be in English and will be accepted until April 15, 2023. They should be addressed to Prof. Dr. Astrid Lambrecht, Member of the Board of Directors of Forschungszentrum Jülich GmbH, and to Univ.-Prof. Dr. Carsten Honerkamp, Dean of the Faculty of Mathematics, Computer Science and Natural Sciences at RWTH Aachen University, and sent preferably by email to **jcns-2@jara.org**.