



As a member of the Helmholtz Association, Forschungszentrum Jülich makes an effective contribution to solving major challenges facing society in the fields of information, energy, and bioeconomy. It focuses on varied tasks in the area of research management and utilizes large, often unique, scientific infrastructure. Come and work with around 5,900 colleagues across a range of topics and disciplines at one of Europe's largest research centres.

The institute of Theoretical Nanoelectronics (PGI-2) concerns itself with investigating structure formation in condensed matter, starting on electronic length and time scales while bearing in mind macroscopic consequences. These studies are closely connected in diverse ways with experimental work within the institute, and also with projects in other institutes at Forschungszentrum Jülich.

The main focus of our work is placed on the electronic structure of solids, in particular with regard to their importance in information technology and cooperative phenomena in condensed matter. Research questions here concern dynamic structure formation processes together with the statistical mechanics of order and disorder processes. Special topics in the field of complex fluids deal with the structure and dynamics of soft matter.

We are looking to recruit as soon as possible a

## 2018-305 - Postdoctoral Researcher in Quantum Information and Thermodynamics

### Your Job:

- studying quantum heat engines in presence of environmental disturbance
- understanding information-to-work process in superconducting quantum computational devices
- studying the analogue of fluctuation-dissipation theorem in quantum theory

### Your Profile:

- PhD degree (or nearly graduating) in theoretical condensed matter physics or a related field
- Preference will be given to candidates with background experience in Quantum computation, condensed matter, statistical mechanics, and related Topics. Strong candidates from other fields are encouraged to apply

We look forward to receiving your application until 23.10.2018 via our **Online-Recruitment-System!**

**Questions about the vacancy?**

Contact us by mentioning the reference number

2018-305:

[career@fz-juelich.de](mailto:career@fz-juelich.de)

Please note that for technical reasons we cannot accept applications via email.

[www.fz-juelich.de](http://www.fz-juelich.de)



- Ability and willingness to work in an international, interdisciplinary and distributed teams as well as to assume responsibility

**Our Offer:**

- a varied and challenging area of responsibility in an interdisciplinary team
- Exciting work setting on an attractive research campus with a very good infrastructure, ideally situated within the city triangle of Cologne, Düsseldorf, and Aachen
- A comprehensive further training programme, including German language courses
- Flexible working hours and various opportunities to reconcile work and family life
- Limited for 1 years with possible longer-term prospects
- Full-time position with the option of slightly reduced working hours
- Salary and social benefits in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD)

Forschungszentrum Jülich aims to employ more women in this area and therefore particularly welcomes applications from women.

We also welcome applications from disabled persons.