



Paderborn University is a high-performance and internationally oriented university. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our employees in research, teaching, technology and administration a lively, family-friendly and equal opportunity environment, a lean management structure and diverse opportunities.

Join us to invent the future!



Paderborn  
Center for  
Parallel  
Computing



NATIONALES  
HOCHLEISTUNGS  
RECHNEN

The **National High-performance Computing Center (NHR)** and research institute **Paderborn Center for Parallel Computing (PC2)** is seeking as soon as possible a

## Postdoc as HPC expert for atomistic simulation (f/m/d)

### Focus on Plane-Wave DFT

(Salary according to EG 13 or EG 14 TV-L)

with 100 % of the regular working hours. This is a qualification position within the meaning of the Wissenschaftszeitvertragsgesetz (WissZeitVG), which serves to qualify as an HPC consultant (f/m/d) for solid-state physics. The position is initially available for 3 years, depending on the qualification achieved to date.

#### Core tasks will include:

- Cooperative research and development together with users from the focus areas of PC2 (esp. physics, chemistry, engineering)
- Support of users of PC2 with plane-wave DFT calculations and their optimization and workflow setup
- Organization and set up of courses, workshops, and conferences in the area of atomistic simulations in the focus area of the applicant
- Extension of the hard- and software infrastructure in cooperation with the operation staff
- For EG 14 TV-L the assignment of additional tasks in independent research and project management is required

#### Your profile:

- Scientific university degree, Promotion in theoretical solid-state physics, chemistry or material sciences
- Advanced knowledge of density functional theory with plane waves
- Experience with plane-wave-based DFT codes like VASP, QuantumEspresso, or ABINIT
- Practical experience with the simulation using HPC clusters
- Good knowledge in performance-oriented programming and optimization
- Very good English skills, written and spoken
- Ability to work independently and with commitment

#### Advantageous qualifications:

- Good German skills, written and spoken
- Knowledge and experience of methods beyond DFT like hybrid functionals, BSE, or GW
- The desire to work on PC2 research topics
- High affinity for supporting users in the realisation of their computing projects

#### What we offer:

- An open and international working environment with very good prospects for further qualification, e.g. for postdocs
- Challenging and interesting research topics and a team of researchers, HPC admins, and support staff to tackle them together
- Work with state-of-the-art HPC systems and accelerators
- Sufficient scope for realizing your own ideas and professional development
- Flexible working hours, the possibility of part-time work, and the option to work partly at home
- Modern equipment at the workplace and for mobile work

Applications from women are particularly welcome and, in case of equal qualifications and experiences, will receive preferential treatment according to the North Rhine-Westphalian Equal Opportunities Act (LGG), unless there are preponderant reasons to give preference to another applicant. Part-time employment is, in principle, possible. Applications from disabled people with appropriate suitability are explicitly welcome. This also applies to people with equal opportunities in accordance with the German social law (SGB IX).

Please send your application including a motivation letter, CV, and certificates via email (using the **Ref. No. 6463**) to: [pc2-jobs@uni-paderborn.de](mailto:pc2-jobs@uni-paderborn.de) or the address listed below. If you have any questions about the job profile send them as well to this address. Further information on the PC2 can be found at: <https://pc2.uni-paderborn.de/go/jobs>.

Information on the processing of your personal data can be found at: <https://www.uni-paderborn.de/zv/personaldatenschutz>.

**Prof. Dr. Christian Plessl**  
Paderborn University  
PC2  
Warburger Str. 100  
33098 Paderborn

