

## Research associates (m/f/x)

Online seit 08.07.2025 | 2025-07-08-935785 | Wissenschaftliche Stellen

---

### Stellenbeschreibung

Faculty of Physics and Astronomy:  
Theoretical Physics I Computational Plasma Physics

In order to fill a **fixed-term position in part-time (15,9320 Std. =40%) 01.09.2025**, we are looking for 1

#### Research associates (m/f/x)

The Institute for Theoretical Physics I of the Ruhr-Universität Bochum (Bochum, Germany) invites applications from candidates (m/f/x) with interest in global magnetospheric simulation, and in innovative numerical methods for the simulation of plasmas.

• The ideal candidate (m/f/x) should be very familiar with the following items: • plasma physics, space physics • numerical methods for plasma simulations: kinetic, two fluid 10 and 5 moment models • the closure problem in plasma modeling • computer programming in Python, Fortran, C and/or C++ • High Performance Computing, parallel programming

#### Your tasks:

- Investigation of the interaction of superAlfvenic flow with a magnetized obstacle
- Investigation of magnetospheric dynamics
- 5 moment global simulations
- Code development
- Coupling of 5 and 10 moment codes
- Code optimization
- Code porting to cluster/ booster

### Anforderungsprofil & Qualifikationen

#### Your profile:

- **A Ph.D. in space physics or similar discipline is required**
- Experience with two fluid 5 moment models
- Experience with two fluid 10 moment models
- Code development experience
- Experience with code parallelization and porting to GPUs
- Deep knowledge of space physics
- Deep knowledge of plasma physics
- Capability of working in a group

#### **We offer:**

- Employment at one of the largest universities in Germany within the University Alliance Ruhr
- Collaboration in a committed and appreciative team
- Challenging and varied tasks with a high level of independence
- Options for flexible working (mobile working and teleworking)

#### **Further information:**

The position is salaried and based on the collective agreement of the Länder (TV-L). If the personal and collective agreement requirements are met, the employee will receive pay grade E/13 TV-L.

Further information can be found at <https://oeffentlicher-dienst.info/> (in German).

The place of work is Ruhr University Bochum.

If the position is funded by third-party funds the employee has no teaching obligation.

German language courses are offered by the University Language Center (ZFA) in the field of German as a Foreign Language (DaF).

<https://www.daf.ruhr-uni-bochum.de/sbgk/index.html.en>

The Staff Council has the right to participate in all selection interviews. At the request of a candidate (m/f/x), it will ensure its participation in the entire procedure. Please contact [wpr@rub.de](mailto:wpr@rub.de).

The Ruhr-Universität Bochum is one of Germany's leading research universities, addressing the whole range of academic disciplines. A highly dynamic setting enables researchers and students to work across the traditional boundaries of academic subjects and faculties. To create knowledge networks within and beyond the university is Ruhr-Universität Bochum's declared aim.

The Ruhr-Universität Bochum stands for diversity and equal opportunities. For this reason, we favour a working environment composed of heterogeneous teams, and seek to promote the careers of individuals who are underrepresented in our respective professional areas. The Ruhr-Universität Bochum expressly requests job applications from women. In areas in which they are underrepresented they will be given preference in the case of equivalent qualifications with male candidates. Applications from individuals with disabilities are most welcome.

#### **Contact persons for further information:**

Prof. Dr. Maria Elena Innocenti Tel.: +49 234 32 23757

Travel costs, accommodation costs and loss of earnings or other application costs for job interviews can unfortunately not be reimbursed.

We look forward to receiving your application via our **online application portal by 2025-07-16**. Please make sure to mention the reference number ANR 4713.

## **Vorteile für Mitarbeitende**

- Vergünstigtes Jobticket
- Arbeitsplatz in lebendiger Metropolregion

## **Stellenmerkmale**

Beschäftigungsart	<b>Wissenschaftliche Stellen</b>
Beschäftigungsumfang	<b>Teilzeit (befristet)</b>
Home Office	<b>Nein</b>
Bewerbungslink	<a href="https://jobs.ruhr-uni-bochum.de/jobposting/59f9c9a3b0a86c2abb457f00a1680b71e0757612?ref=stellenwerk">https://jobs.ruhr-uni-bochum.de/jobposting/59f9c9a3b0a86c2abb457f00a1680b71e0757612?ref=stellenwerk</a>

---

# Kontakt­daten

Firma/Hochschule

**Ruhr-Universität Bochum**


Anschrift

**Universitätsstraße 150  
44801 Bochum**

Kontakt

**Prof. Dr. Maria Elena Innocenti**

Telefon

 **+49234 32 23757**

E-Mail



Webseite

**<https://uni.ruhr-uni-bochum.de/de/stellenangebote>**