

External Job Advertisement Reg. Nr. 5-5160/26-D

The Faculty of natural sciences II, Institute of physics, at Martin Luther University Halle-Wittenberg is seeking a full-time

Research Assistant (Postdoc) (m-f-d)

for a fixed term of 1 year, starting from 01.08.2026.

Remuneration will be determined based on job duties and responsibilities and will be aligned with the fulfillment of listed personal requirements, up to pay grade __ under the *TV-L (Tarifvertrag für den Öffentlichen Dienst der Länder – 'German Public Service Pay Agreement for the Federal States')*.

This position is based in the newly established Schröter Lab, where we explore novel electronic phenomena in chiral and topological materials. We offer a vibrant research environment at the cutting edge of condensed matter physics. Our group has an exceptional track record of success, from securing prestigious funding to fostering the careers of our postdocs, many of whom have transitioned into permanent positions in academia. We invite applications from ambitious researchers eager to contribute to pioneering science in a supportive and internationally visible setting with excellent opportunities for professional growth.

Job Responsibilities:

- Growth of chiral-magnetic thin films by molecular-beam epitaxy (MBE) (complex oxides, heusler alloys, 2-D materials) using a controlled strain engine
- Performing and analysing ARPES measurements (photon-energy-dependent mapping, spin-ARPES)
- Conducting RIXS experiments at synchrotron beamlines (energy- and momentum-resolved information)
- Surface and scanning-probe microscopy (AFM/STM) – scanning and imaging tasks, topography analysis
- Magnetotransport and magnetisation measurements (PPMS, VSM/SQUID) – resistivity, Hall effects, magnetisation curves
- Assembly, maintenance and optimisation of ultra-high-vacuum (UHV) systems (UHV-chambers, pumps, leak detection, bake-out)
- Data analysis with relevant software including programming, particularly in IgorPro and MATLAB
- Interpretation of results, contribution to publications in international peer-reviewed journals and presentation at scientific conferences
- Close collaboration with partner groups (theory, synchrotron facilities, industrial collaborations)

The opportunity to gain scientific qualifications is given.

Requirements:

- Completed university degree in Physics or equivalent qualification
- Completed doctoral degree (Ph.D.) in Physics or equivalent qualification
- Hands-on experience with MBE growth of functional thin-film materials
- Proficient in performing ARPES experiments
- Experience in conducting RIXS measurements
- Working knowledge of AFM and STM techniques
- Familiarity with PPMS, VSM and SQUID instrumentation
- Practical experience in assembling, operating and maintaining UHV systems

- Programming skills, especially in IgorPro and MATLAB for data processing
- Strong analytical skills, ability to work independently and as part of a team
- Excellent command of English, both spoken and written

Applications from disabled persons, including those of equal status (as certified by the *Bundesagentur für Arbeit* / Federal Employment Agency), will be given preferential consideration if they are equally suitable and qualified. Women are strongly encouraged to apply. Applications from individuals of all nationalities are explicitly welcome. Applicants with a degree that was not obtained at a German university must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (ZAB) (<https://www.kmk.org/zab/central-office-for-foreign-education>) as proof of equivalence upon conclusion of the employment contract. You can find ways to apply for a financial grant for this under: <https://www.anerkennung-in-deutschland.de/html/de/pro/anererkennungszuschuss.php#>.

If you have any questions, please contact Prof. Niels Schröter, Tel.: +49 345 55-82793, Email: niels.schroeter@physik.uni-halle.de.

Please send your application, including Reg. No.: 5-5160/26-D with the required documents to recruitment-schroeterlab@physik.uni-halle.de until 10/06/2026.

This job posting is subject to potential budgetary restrictions.

Application costs will not be reimbursed by Martin Luther University. Application documents will only be returned if a sufficiently stamped envelope is enclosed. Electronic applications are welcome.