In the School of Mathematics and Natural Sciences,
the Experimental Elementary Particle Physics working group,

invites applications for

a position as

Research Assistant (Post-Doc)

This position is to be filled at the earliest possible date and limited until 30th of June 2027
with the possibility of an extension until 30 June 2030 (subject to final approval of the
financing commitment)

The position is to be filled with 100% of the tariff working hours
(Part-time is possible, please state when applying whether you would also be interested in a part-
time job.)

Salary: E 13 TV-L

Professional and personal requirements:

- Completed university degree (Master's or comparable) and doctorate in computer science,
  physics or related fields
- Experience with the Linux operating system and distributed systems
- Programming skills in C++, Python and/or other programming languages
- Experience in effective processing of data
- Experience with software projects in large-scale experiments at CERN is desirable
- Experience with Geant4 and Athena is an advantage.
- Experience with Docker and/or other container technologies is helpful
- Very good knowledge of English

Tasks:

The Experimental Particle Physics working group at the University of Wuppertal is involved in the
ATLAS experiment at CERN (Switzerland) and has been working for many years in the development
and operation of the Pixel detector as well as analyses of various physics topics in elementary
particle physics. In the view of the operation of the experiment the simulation software is of
uttermost importance. The ATLAS simulation software must be continuously improved, validated and
maintained to meet the physics requirements of the ATLAS experiment for the present and
upgraded.

The candidate is expected to contribute to the development and maintenance of the ATLAS core
simulation code, which includes monitoring the software performance and following up on technical
issues that can arise during release tests and Monte Carlo production campaigns. Experience with
Geant4 and Athena would be advantageous but are not required. The candidate is also encouraged
to contribute to simulation software shifts.

The work is being carried out as part of the BMBF joint project "Physics with the ATLAS experiment at the Large Hadron Collider - ErUM-FSP T02 ATLAS-Germany". Close collaboration with colleagues at CERN and in working groups at other universities and institutes is a prerequisite for the success of the project.

An extended research stay at CERN is possible.

The contact person is Dr Dominic Hirschbühl (hirsch@physik.uni-wuppertal.de)

Reference code: 25171

Applications including all relevant credentials (motivation letter, CV, proof of successful graduation, job references, and if applicable, evidence of a severe disability as a PDF file) should be addressed to Dr. Dominic Hirschbühl and solely submitted via the online portal of the University of Wuppertal: https://stellenausschreibungen.uni-wuppertal.de. Kindly note that incomplete applications will not be considered.

The University of Wuppertal is an equal opportunity employer. Applications from persons of any gender and persons with disabilities as well as persons with an equivalent status are highly welcome. In accordance with the Gender Equality Act of North Rhine-Westphalia, women will be given preferential consideration unless there are compelling reasons in favour of an applicant who is not female. The same applies to applications from disabled persons, who will be given preference in the case of equal suitability.

Application deadline: 14.07.2025