Dresden University of Technology

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Faculty of Physics, Institute of Nuclear and Particle Physics**, the **Chair of Particle Physics and its Simulation** offers a position as

Research Associate / Postdoc (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **October 1, 2026 or earlier.** The position is limited until September 30, 2029. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification. Balancing family and career is an important issue. The position is generally suitable for candidates seeking part-time employment. Please indicate the request in your application.

Tasks:

- scientific research into the development of Monte Carlo simulation programs for particle physics
- further development of the Sherpa event generator, particularly relating to one or more of the following areas:
  - heavy flavor production using the fusing method
  - polarization of unstable particles
  - sustainability and practical aspects of event generation in large LHC experiments
  - neutrino scattering
- scientific teaching in accordance with faculty requirements
- communication of the research findings in publications and conference presentations

Requirements:

- university and PhD degree in physics with a specialization in particle physics
- expertise in Monte Carlo event generator development
- high self-motivation and problem-solving skills

We offer:

- we will be happy to welcome you to a vibrant research group at the interface of theoretical and experimental particle physics, comprising of the group leader and 2 post-docs, 4 PhD students, 6 MSc students
- collaborations and networking with leading research groups in the field
- opportunity to define and supervise student projects at the Bachelor, Master and PhD level shaping your own research profile

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your detailed application including a motivation letter and CV by **January 26, 2026** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf file to **frank.siegert@tu-dresden.de** or to:

TU Dresden, Chair of Particle Physics and its Simulation, Prof. Frank Siegert, Helmholtzstr. 10, 01069 Dresden, Germany.

Please also arrange for at least **two letters of recommendation** to be sent to the same address by that deadline.

Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis.