



Mit über 6 300 Beschäftigten in Forschung, Lehre und Verwaltung und ihrem einzigartigen Profil gestaltet die Technische Universität Dortmund Zukunftsperspektiven: Das Zusammenspiel von Ingenieur- und Naturwissenschaften, Gesellschafts- und Kulturwissenschaften treibt technologische Innovationen ebenso voran wie Erkenntnis- und Methodenfortschritt, von dem nicht nur die 34 500 Studierenden profitieren.

Postdoctoral position, E13 TV-L (m/w/d) - Ref.-Nr. w95-25

The department of physics at TU Dortmund University is offering a Postdoc position, which is intended to be filled as soon as possible.

The successful candidate is expected to predominantly contribute to the work packages Data Collection and Deployable Instance within the ErUM-Data funded project Physics-LLM.

Physics-LLM aims at delivering an LLM-enhanced toolkit for research data management for the ErUM communities.

The position is limited to 2.5 years. According to the public tariff regulations, the salary is based on tariff group E13 TV-L. The position is a full-time position (100%).

Your tasks:

- Optimization of multi-modal information retrieval in the ErUM Data project *Physics-LLM*
- Development of a vector database for information retrieval in astroparticle physics
- Development and maintenance of the underlying system architecture
- Synthesis of developments in IceCube and KM3Net
- Provision of data preprocessing for optimal LLM-usage
- Deployment in community specific frameworks in APP and PaN

We offer:

- Possibility to conduct research in a highly dynamic environment
- Inspiring research environment
- A highly motivated team
- Career development and individual support
- A wide range of opportunities for personal development

Your qualification:

- Completed university degree with a doctorate in physics, computer science or a comparable subject
- Strong programming skills
- Very good English skills
- Ability to work in an interdisciplinary context
- Experience in using machine learning methods

Ideally you have:

- A strong background in astroparticle physics or particle physics
- Experience in working with LLMs and natural language processing
- Enthusiasm for the application of LLMs in Research Data Management

The TU Dortmund University promotes diversity and equal opportunities. Convince us with your personality and expertise. Applications from women will be given preferential treatment in accordance with the legal regulations. It is pointed out that the application of suitable severely disabled persons is desired.

Complete applications including a cover letter, CV, a max. two-page outline of research interests, certificates and at least two contacts for further references should be sent stating reference number **w95-25** until **05.03.2026** to:

tim.ruhe@tu-dortmund.de

Technische Universität Dortmund

Fakultät Physik

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