



Universität Hamburg  
DER FORSCHUNG | DER LEHRE | DER BILDUNG

As a University of Excellence, Universität Hamburg is one of the strongest research universities in Germany. As a flagship university in the greater Hamburg region, it nurtures innovative, cooperative contacts to partners within and outside academia. It also provides and promotes sustainable education, knowledge, and knowledge exchange locally, nationally, and internationally.

The Center for Data and Computing in Natural Sciences (MIN Faculty) which is currently being formed invites applications for a

## RESEARCH ASSOCIATE FOR MACHINE LEARNING IN PARTICLE AND ASTROPHYSICS

- SALARY LEVEL 13 TV-L -

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The position in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on September 1, 2020.

This is a fixed-term contract in accordance with Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed until December 31, 2023. The position calls for 39 hours per week. This position is also suitable for part time employment.

The Center for Data and Computing in Natural Science (CDCS) is a new scientific institution formed as a partnership between the University of Hamburg, the Hamburg University of Technology and DESY. During the initial phase (funded by the BWFG until the end of 2023), a decision will be made on the continuation of the CDCS. The CDCS is dedicated to the development and application of modern information technologies (Data Science, Artificial Intelligence, Scientific Computing) to complex scientific questions. With modern organisational concepts (so-called Cross-Disciplinary Labs) a flexible structure is created, which works integrative between the scientific groups of computer science and mathematics on the one hand and the natural sciences on the other hand.

A total of 11 postdoctoral positions will be filled in the CDCS, 3 of which will be in the Informatics Core Unit and 2 in each of the four thematic Cross-Disciplinary Labs. The thematic priorities of the CDLs are: Astro- and Particle Physics (1), Photon Science (2), Systems Biology (3) and Control of Accelerators (4).

### RESPONSIBILITIES:

Duties include academic services in the project named above. Research associates may also pursue independent research and further academic qualifications.

## SPECIFIC DUTIES:

The Cross-Disciplinary Lab on Computational Astro- and Particle Physics focuses on the application and development of machine learning methods, based on data from experiments at particle accelerators and astrophysical observatories.

This position will focus on the development of machine learning techniques for the extraction and understanding of data features based for example on latent space representations with applications in particle physics and astrophysics.

We expect close collaboration with particle physics and astrophysics groups, with other projects in CDCS, as well as with groups in computer science and mathematics.

## REQUIREMENTS:

A university degree in a relevant subject plus doctorate. Required is a PhD in physics or computer science, experience in statistical data analysis and machine learning, excellent team working abilities as well as oral and written communication skills in English.

CDCS is envisioned as an agile work environment with cross teaching and knowledge transfer among the participating scientists. We therefore encourage applications of communicative engaging individuals that have a strong interest to work in an inspiring place of mutual exchange.

The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented in this job category at Universität Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally qualified and suitable female applicants will receive preference.

Qualified disabled candidates or applicants with equivalent status receive preference in the application process.

For further information, please contact Prof. M. Brügggen ([mbrueggen@hs.uni-hamburg.de](mailto:mbrueggen@hs.uni-hamburg.de)) or Prof. P. Schleper ([Peter.Schleper@physik.uni-hamburg.de](mailto:Peter.Schleper@physik.uni-hamburg.de)) or consult our website at <https://www.cdcs.uni-hamburg.de>. Please register under the keyword "CDL 1"

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by July 17, 2020 to: [jobs.cdcs@uni-hamburg.de](mailto:jobs.cdcs@uni-hamburg.de).

Please do not submit original documents as we are **not** able to return them. Any documents submitted will be destroyed after the application process has concluded.