



For our location in Hamburg we are seeking:

## Postdoc for "MACHINE LEARNING IN PARTICLE AND ASTROPHYSICS"

Remuneration Group 13

### DESY

DESY, with its 2700 employees at its two locations in Hamburg and Zeuthen, is one of the world's leading research centres. Its research focuses on decoding the structure and function of matter, from the smallest particles of the universe to the building blocks of life. In this way, DESY contributes to solving the major questions and urgent challenges facing science, society and industry. With its ultramodern research infrastructure, its interdisciplinary research platforms and its international networks, DESY offers a highly attractive working environment in the fields of science, technology and administration as well as for the education of highly qualified young scientists.

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. CDCS is dedicated to the development and application of modern information technologies ( data science, artificial intelligence, scientific computing) to solve complex, scientific problems at leading research institutions in Hamburg. Its aim is to foster cooperation between computer science and mathematics on the one hand and the natural sciences on the other through Cross-Disciplinary Labs. Initial thematic priorities include Astro- and Particle Physics, Photon Science, Systems Biology, and Control of Accelerators.

### The position

- 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 be embedded in the field of particle physics and focus on the optimisation of machine learning methods based on generative networks for the fast and accurate simulation of complex signals from particle detectors
- 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

- 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

For further information please contact Dr. F. Gaede ([frank.gaede@desy.de](mailto:frank.gaede@desy.de)) and consult our website at <https://www.cdc.s.uni-hamburg.de>.

The position is limited to 3 years.

Salary and benefits are commensurate with those of public service organisations in Germany. Classification is based upon qualifications and assigned duties. Handicapped persons will be given preference to other equally qualified applicants. DESY operates flexible work schemes. DESY is an equal opportunity, affirmative action employer and encourages applications from women. Vacant positions at DESY are in general open to part-time work. During each application procedure DESY will assess whether the post can be filled with part-time employees.

We are looking forward to your application via our application system: [www.desy.de/onlineapplication](http://www.desy.de/onlineapplication)

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Deadline for applications: Until July, 30 2020 or until the position is filled.