

Faculty/Departement Mathematics, Informatics, Natural Sciences/Department of Physics
Seminar/Institute Institute for Experimentalphysics

Universität Hamburg invites applications for a Research Associate (Postdoc) in accordance with Section 28 subsection 2 of the Hamburg Higher Education Act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on February 1st, 2018 .

It is remunerated at the salary level TV-L 13. Providing that a position is available and that requirements have been fulfilled, the associate may apply for temporary civil servant status in accordance with Section 28 subsection 2 HmbHG.

The position is full-time and comprises 39 hours per week (40 for civil servants).

The fixed-term nature of this contract is based upon Section 2 of the Academic Fixed-Term Labor Contract Act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The initial fixed term is three years. The contract provides for a maximum extension of up to three years depending on the associate's achievements during the first stage.

The University aims to increase the number of women in research and teaching and explicitly encourages qualified women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg Equality Act (Hamburgisches Gleichstellungsgesetz, HmbGleiG).

Responsibilities:

Duties include research and teaching in the respective department or institute. Research associates can also pursue independent research and further academic qualifications as well as acquire teaching experience. These duties are intended to promote academic achievement. Therefore, at least one-third of set working hours will be made available for the associate's own academic work.

Specific Duties:

The successful candidate will carry out research in experimental searches for Dark Matter and new physics beyond the standard model. Specific duties will be:

- Design and test prototype installations for planned Axion-Dark matter search experiments including BRASS (optimization of microwave secondary optics, permanent magnet arrays for conversion, low-noise microwave receiver and read-out)
- Take a leading role in the development of an all-fiber laser interferometer to search for effects of photons mixing with new light fundamental bosons.
- Develop further the existing dark matter search experiment WISPDmX

Additional participation in studies towards the helioscope IAXO and astrophysical observations of axion-like particle's signatures in gamma-ray spectra are encouraged.



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The candidate will participate in the undergraduate teaching of the department at the level of 4 hours per week during the semester (6 hours per week in case of extension).

Requirements:

A university degree in a relevant subject plus doctorate.

- A doctoral degree in Physics.
- Experience in the field of microwave technology and CST studio modeling
- Experience with cryogenic technology (low noise amplifier, squids etc.)
- Additional experience in astroparticle and particle physics are very much welcome.

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact

Prof. Dieter Horns (dieter.horns@physik.uni-hamburg.de) or consult our website at <http://www.iexp.uni-hamburg.de/groups/astroparticle/>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is December 1th, 2017. Please send applications to: dieter.horns@physik.uni-hamburg.de .