



**Faculty/Departement** Mathematics, Informatics, Natural Sciences/  
**Seminar/Institute** CUI

Universität Hamburg invites applications for a Research Associate for the project “**Extreme X-ray intensities**” in accordance with Section 28 subsection 3 of the Hamburg Higher Education Act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on 01 August 2018.

It is remunerated at the salary level TV-L 13 and calls for 50 % of standard work hours per week\*.

The fixed-term nature of this contract is based upon Section 2 of the Academic Fixed-Term Labor Contract Act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed to 31 October 2019.

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

#### **Specific Duties:**

DESY and CUI offer exciting opportunities to pursue science in a broad range of topics at world-class high brilliance X-ray sources such as PETRA III, the FLASH free-electron laser, and the European XFEL. The X-ray multilayer group at DESY carries out research and develops new concepts on imaging of hierarchical nanostructured materials in biological and material science systems to give new materials design rules; to map biological cells at the level of their macromolecular components; and to perform time resolved imaging of phase transitions, crack propagation, and other dynamical properties at the atomic or molecular scales. The group extends the state of the art in nanometer X-ray focusing and pulse compression. We are seeking a strongly motivated candidate to undertake studies to develop X-ray lenses and volume gratings to achieve extreme X-ray intensities beyond  $10^{22}$  W/cm<sup>2</sup> using free-electron laser sources.

The candidate should have a strong background in optics, imaging, x-ray physics or interferometric methods. Good knowledge of English language (written and oral) and ability to work in a team is required. Expertise in analytical, quantitative, instrumentation or computational methods is a plus.

\* Full-time positions currently comprise 39 hours per week.



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

**Requirements:**

A university degree in a relevant field. The candidate should have a Master degree in either Physics or Applied Science (physics or optics).

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

For further information, please contact Saša Bajt ([sasa.bajt@desy.de](mailto:sasa.bajt@desy.de)) or consult our website at [https://cid.cfel.de/team/multilayer\\_x\\_ray\\_optics/saa\\_bajt/](https://cid.cfel.de/team/multilayer_x_ray_optics/saa_bajt/).

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is 20 June 2018. Please send applications to: Saša Bajt ([sasa.bajt@desy.de](mailto:sasa.bajt@desy.de)).