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 Faculty of Mathematics, Informatics and Natural Sciences and the Research Centre Deutsches Elektronen-Synchrotron (DESY) jointly invite applications for a

**PROFESSORSHIP (W3) FOR MATHEMATICS WITH A FOCUS ON MODEL-BASED INVERSE DESIGN**

commencing as soon as possible, ref. no. 2349/W3.

DESY is one of the world’s leading research centers for photon science, particle and astroparticle physics as well as accelerator physics. As part of the Information & Data Science Incubator initiated by the Helmholtz Association, DESY is currently implementing the Helmholtz Imaging Platform (HIP) together with the Max Delbrück Center and the German Cancer Research Center to promote imaging science and to foster synergies between imaging techniques and applications within the Helmholtz Association and the international imaging community. The HIP aims to bring scientists and engineers together, facilitate interdisciplinary collaboration and thus bridge theory and application.

**RESPONSIBILITIES:**

We are looking for a candidate with an outstanding international reputation in the field of inverse problems, who is willing to actively participate in shaping the HIP and to contribute to the research areas at DESY. Successful candidates are expected to participate in relevant research activities of model-based inverse design to foster collaboration with the Department of Mathematics at Universität Hamburg.

Preference is given to candidates with relevant research activities in learning-based algorithms for signal and image processing, preferably with a focus in either phase field reconstruction, tomographic inversion or deconvolution and denoising. Moreover, profound methodological knowledge on both the model level and the inverse design level is expected.

The tasks of the future postholder include supporting the HIP network, providing scientific advice to HIP projects, making personal contributions to enriching HIP solutions and thus advancing the HIP as a whole (www.helmholtz-imaging.de).

The successful candidate is expected to teach courses in applied mathematics at Universität Hamburg for two semester hours per week.
In their application, applicants are expected to indicate to which of the University’s core research areas, emerging fields, or profile initiatives (https://www.uni-hamburg.de/en/forschung/forschungsprofil/forschungsschwerpunkte.html) their research can best be assigned. Duties include working in one or more of the core research areas, emerging fields, or profile initiatives.

Section 12 subsection 7 sentence 2 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) applies.

**REQUIREMENTS:**

Academic qualifications and additional requirements as specified in Section 15 HmbHG.

**ADDITIONAL CRITERIA:**

Applicants are expected to have international research experience as well as a successful track record in acquiring external funding and carrying out externally funded projects. The University places particular emphasis on the quality of teaching and therefore requests that applicants provide details of their teaching experience and objectives.

Non-German-speaking post holders are expected to acquire the language skills necessary to teach in German (Level C1 of the Common European Framework of Reference for Languages) within two years of commencing employment.

In accordance with Section 14 subsection 3 sentence 3 HmbHG, Universität Hamburg seeks to increase the proportion of women in teaching and research and encourages female academics to apply.

Suitable disabled candidates or applicants with equivalent status with comparable qualifications, abilities, and experience receive preference in the application process.

For further information, please contact Prof. Dr. Christian Schroer (DESY) (christian.schroer@desy.de) or Prof. Dr. Armin Iske (Universität Hamburg) (armin.iske@uni-hamburg.de).

The application deadline is **11 March 2021**. Please submit your application with your CV, list of publications, teaching experience, successful external funding record, copies of certification and documents, three representative publications, teaching and research plans, additional evidence of skills and experience, such as presentations, posters, significant roles held in organizations, etc. where available, and the reference number **2349/W3**, preferably by email in a single PDF file, to Bewerbungen@uni-hamburg.de or per post to:

An den
Präsidenten der Universität Hamburg
Stellenausschreibungen
Mittelweg 177
20148 Hamburg

Due to the coronavirus pandemic, the academic search procedure is set to proceed digitally. More information is available from the chair of the search committee.