

The Max-Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI), Berlin, Germany, a non-university research institution and member of the Leibniz Association, pursues basic and applied research in ultrafast science, applying a large variety of short pulse laser and x-ray sources for time-resolved spectroscopy, diffraction and imaging.

Within a research project with industrial partners, MBI invites applications for a position of a

## Postdoctoral researcher in lab-based soft x-ray spectroscopy (m/f/d)

### Job profile:

MBI is a partner in a joint research project with industry aiming at the development and application of novel soft x-ray optics for use in lab-based ultrafast spectroscopy. In the project, a novel modular spectrometer system based on reflection zone plates will be implemented at state of the art laser-driven plasma and high harmonic generation sources for the generation of soft x-rays. The system targets spectroscopy in and significantly beyond the water window and is set up in close collaboration with the industrial project partners. The optimization of the overall system from the soft X-ray source to the application experiment is part of the research project. Beyond the setup and refinement phase, the goal is to perform pump-probe transient x-ray absorption experiments on condensed matter samples to demonstrate the capabilities of the system and carry out scientific application experiments. The latter will focus on transient electronic structure after laser excitation in materials with magnetic order and/or correlated electron systems. You will work as a scientist in a team of experts towards this goal, present your results in scientific journals and at conferences, and take part in shaping this research field within MBI.

### Requirements:

The successful candidate holds a Ph.D. degree in physics or a related area and has a track record in performing successful experimental research with hands-on experience in the area of laser based soft x-ray sources and/or soft x-ray spectroscopy. The ability to work both independently and in a team with partners from companies is important. The effective collaboration with industrial partners and scientists requires good oral and written communications skills in English and German.

### Offer:

MBI offers a 2-year appointment with a salary according to the German salary scheme for the public sector (TVöD Bund).

MBI is an equal opportunity employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply. If equally qualified, severely handicapped persons are given preference.

MBI supports the reconcilability of family and working life and is certified as family-friendly by the "family audit".

Please use the button "**Apply online**" and upload your application with a CV, a description of the research experience, publication list, references, and/or recommendation letters electronically via the MBI online recruiting platform at <https://mbi-berlin.de/career>. The deadline for applications is **7<sup>th</sup> June 2020**.

For further questions please contact Prof. Stefan Eisebitt ([eisebitt@mbi-berlin.de](mailto:eisebitt@mbi-berlin.de)) or Dr. Holger Stiel ([stiel@mbi-berlin.de](mailto:stiel@mbi-berlin.de)).