The Max-Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI) conducts basic research in the field of nonlinear optics and ultrafast dynamics arising from the interaction of light with matter and pursues applications that emerge from this research. It develops and uses ultrafast and ultra-intense lasers and laser-riven short-pulse light sources in a broad spectral range in combination with methods of nonlinear spectroscopy. The spectral range includes in particular XUV radiation and soft x-rays, where experiments at in-house sources are complemented with the use of accelerator driven sources such as free electron x-ray lasers.

With its research, MBI fulfils a national mission and is an integral part of the international scientific community.

The Max-Born-Institute invites applications for the position

Postdoctoral Position

Ultrafast Soft-X-Ray Spectroscopy of Elementary Proton Transfer Reactions

Job profile:
The main objective of our research effort is the elucidation of ultrafast elementary charge transfer processes in solution. Currently, we use and further develop state-of-the-art techniques to determine the structural dynamics of reactive donor-acceptor complexes, including electron transfer, proton transfer and proton-coupled-electron transfer of prototypical molecular donor-acceptor complexes, which function as model systems for processes as diverse as electronic charge flow, aqueous proton transport or energy conversion.

The candidate will work on the development and application of novel transient soft-x-ray spectroscopic techniques with high time resolution. This will include the application of soft-x-rays at large scale facilities as well as high-order harmonic radiation generated with a new table-top state-of-the-art femtosecond laser system for time-resolved x-ray spectroscopies based on an optical pump/x-ray probe approach. A recent activity involving the development of condensed phase transient soft-x-ray spectroscopy using novel liquid jet technologies will be further developed.

Requirements:
The successful candidate has a PhD degree in physics or chemistry with above average marks. He/she has experience in at least one of the following fields: optical spectroscopy, soft-x-ray-spectroscopy, ultrafast optics and spectroscopy.

Offer:
The researcher position is available immediately and initially limited to 2 years. The payment is according to the German TVoeD salary scheme for scientists in public research institutions.
The candidates will be members of a research team consisting of senior scientists, postdocs, and PhD students.

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

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

Please upload your application, including cover letter, curriculum vitae, certificates, references and description of previous studies and professional activities as well as a list of publications electronically via the MBI online recruiting platform at http://www.mbi-berlin.de/de/jobs/index.html. The deadline for applications is **31.08.2018**.

For further information and inquires please contact Dr. Erik Nibbering (nibberin@mbi-berlin.de).