

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 ultra-fast and ultra-intense lasers and laser-driven short-pulse light sources in a broad spectral range in combination with methods of nonlinear spectroscopy. With its research, MBI fulfils a national mission and is an integral part of the international scientific community.

In the frame of the DFG Priority Programme "Quantum Dynamics in Tailored Intense Fields" (QUTIF, SPP1840), we are carrying out research on the topic "Generation and Characterization of Chiral Attosecond Pulses" with the goal to study theoretically and to implement experimentally the generation of **circularly polarized attosecond pulses in the XUV spectral domain**. The Max Born Institute awards at the earliest possible date a job as

PhD Student (m/f)

Job profile: We are looking for highly motivated candidates to strengthen our experimental team. During the project, the candidate will gain practical experience in laser, femtosecond and attosecond technologies, including generation of high fidelity sub-5 fs laser pulses and the generation and characterization of high harmonics. Many novel aspects of high harmonics spectroscopy or/and ultrafast electron dynamics in strong, tailored laser fields are included in the research program. The participant will work closely with the theoretical team gaining experience in numerical modelling and data analysis.

Requirements: The applicant holds a master/diploma degree in physics or/and optics/photonics, and has strong affinity to experimental work. Experience in areas of laser physics, X-ray optics, applied programming or solid-state physics are an asset.

Offer: The researcher position is available immediately and initially limited to 3 years. The payment is according to the German TVöD Bund salary scheme for scientists in public research institutions (75 %).

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 a family-friendly by the "family audit".

Please upload your application, including cover letter, curriculum vitae, certificates and description of previous professional activities electronically via the MBI online recruiting platform at <http://www.mbi-berlin.de/de/jobs/index.html>. The deadline for applications is **February 28, 2019**

For further information about the position please contact Dr. Nikolai Zhavoronkov (zhavoron@mbi-berlin.de) or Prof. Mikhail Ivanov (Mikhail.Ivanov@mbi-berlin.de).