

The Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI) is a nonprofit research institution, organized in the legal form of a registered association (Forschungsverbund Berlin e.V.). The MBI is scientifically independent but without legal personality. It is at the same time member of the Leibniz Gemeinschaft.

The MBI conducts basic research in the field of nonlinear optics and ultrafast dynamics of 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-driven short-pulse light sources in a broad spectral range in combination with methods of nonlinear spectroscopy.

## PhD Position in Theoretical Non-Linear Spectroscopy

### Job profile:

The Emmy Noether junior research group at the Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, offers a PhD position in the field of „Theory of Nonlinear Spectroscopy of Biomolecular Dynamics“ (group leader: Dr. B. Fingerhut). The aim of the position will be the development of numerical algorithms for the simulation of nonlinear spectroscopic signals of ultrafast photochemical reactions. Research topics of the Emmy Noether junior research group are the real time description of nonadiabatic excited state dynamics for the investigation of DNA repair mechanisms and primary photocycles of flavoprotein light sensors.

The junior research group has a close collaboration with the experimental groups of Division C („Nonlinear Processes in Condensed Matter“) and active participation of the candidate in interdisciplinary projects is expected.

### Requirements:

Required is a Master's degree in physical chemistry, theoretical chemistry, physics or in a related area. Experience with computational research and/or computer programming will be counted as advantages.

### Offer:

The position is initially for three years with the possibility of extension. The payment is according to the German TVöD (75 %) (treaty for public German service).

The MBI guarantees an equal opportunity for female and male applicants. Furthermore recognized handicapped applicants with equal qualification will be preferred. The MBI is certified for being a family-oriented company („Audit Beruf und Familie“).

Complete applications (motivation letter, CV, copy of degree certificate, transcript of grades, references) are to be sent in electronical form only by **30.06.2017** to Dr. Benjamin Fingerhut (Fingerhut@mbi-berlin.de).