

The **International Max Planck Research School for Ultrafast Imaging and Structural Dynamics** in **Hamburg, Germany**, offers a structured PhD program focusing on ultra-fast phenomena, X-ray physics and dynamical imaging in all areas of science covering physics, chemistry and biology.

26 Interdisciplinary doctoral PhD projects in the fields of Ultrafast Science and Quantum Materials

Research

The program offers exciting research opportunities at ultra-intense electron and X-ray sources to directly observe atomic motions during primary events. The use of ultrafast imaging over the relevant length and time scales generates new levels of understanding of the interplay between structure and dynamics. Specific areas include the theoretical and experimental aspects of quantum materials and atomically resolved dynamics, fundamental light-matter interaction, accelerator-based light sources, coherent controlled molecular and solid-state dynamics, molecular imaging, extreme timescale spectroscopy, ultrafast optics and X-ray science.

We offer:

- A range of PhD positions in these areas: [open positions](#)
- State-of-the-art research facilities on an extensive science campus
- Cross-disciplinary research in a vibrant, international scientific environment
- First class supervision and mentorship by a team of internationally renowned experts
- Outstanding training in your scientific subject and transferable skills (in English)
- A 3-year employment contract based on the German federal pay agreement

Requirements

We seek applicants with an excellent academic background. You hold (or are about to complete) an MSc degree or equivalent in physics, chemistry or related areas. You need to be passionate about research in ultrafast phenomena and motivated to conduct rigorous scientific work over the full degree period.

Apply

Applications must be submitted via the [online application portal](#). The application deadline is 6th November 2025. PhD projects start in summer/autumn 2026. In exceptional cases, it may be possible to start on the research project earlier. For any further questions or problems regarding the application process or the online system, please contact the IMPRS UFAST coordinator on IMPRS.UFAST@mpsd.mpg.de.

