MAX PLANCK INSTITUTE FOR MULTIDISCIPLINARY SCIENCES



PhD Position in Artificial Intelligence (AI) for Nanoscale Imaging (f/m/x)

The Department of Prof. Dr. Stefan W. Hell invites applications for a **PhD position exploring AI approaches in optical science, molecular imaging and biophysics**. Opportunities are available in Göttingen or Heidelberg for highly motivated candidates to join a world-leading, multidisciplinary research group. The candidate can apply for admission to the **Max Planck School of Photonics** or the **Göttingen Graduate Center for Neurosciences, Biophysics, and Molecular Biosciences (GGNB)**.



The PhD student will work on novel AI-aided data analytics, especially of dynamic singlemolecule datasets from MINFLUX and MINSTED experiments to study biomolecules with optics. MINFLUX and MINSTED have unlocked the door to unique minimally invasive, lowlight-level analysis of the structure and dynamics of macromolecules at the nanometer scale. This includes experiments at 1-nm resolution and with Angström measurement precision.

Your Qualifications

- Master's degree in Computer Science, Applied Mathematics, Physics, Biophysics or a similar qualification
- Interest in and/or experience with AI/machine learning
- A willingness to learn and extend this knowledge and master new challenges in the context of the research projects
- Ability to work independently and within a team
- A high level of critical thinking
- Previous experience with related techniques (photonics, fluorescence, imaging or biochemical methods) is helpful

Our offer

- Highly motivated team
- Flexible working hours
- World-class institute with outstanding working environment

Position details

The payment and benefits are based on the wage agreement for public service personnel guidelines (TVöD Bund). The position is limited to three years with a possibility of extension.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds.

Application procedure

Applications will be reviewed on a rolling basis until the position is filled. Please submit your application with a cover letter, a CV and transcripts no later than 15 July 2025 preferably via e-mail and as a single PDF file to:

ausschreibung18-25@mpinat.mpg.de

Max Planck Institute for Multidisciplinary Sciences Department of NanoBiophotonics Prof. Dr. Stefan W. Hell Am Faßberg 11 37077 Göttingen Germany

