

JOHANNES PORSCH

Munich

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EDUCATION

Physics M.Sc., Federal Institute of Technology Zurich	10.2024 - 09.2026
<ul style="list-style-type: none">Expected courses: Quantum Field Theory, Ultrafast Laser Physics	
Physics B.Sc., Ludwig-Maximilian-University of Munich	10.2022 - 08.2025
<ul style="list-style-type: none">Elective courses: Advanced Programming techniques, Computational Physics/Machine Learning, Programming with python, Astrophysics II, General Relativity^{*1}, Cosmology and large scale structures*Bachelor thesis: <i>The role of excited states in strong field ionization</i>	
Mathematics B.Sc. ² , Ludwig-Maximilian-University of Munich	10.2023 - 08.2025
<ul style="list-style-type: none">Attended courses: Analysis I-III*, Linear Algebra I, Numerical Mathematics, ODE*, Differential Geometry*, PDE*, Complex Analysis	
Abitur Thomas-Strittmatter-Gymnasium St. Georgen	10.2014 - 07.2022
<ul style="list-style-type: none">DMV and DPG Abitur award	

PRACTICAL EXPERIENCE

Bachelor thesis at Max Planck Institute of Quantum Optics	03.2025 - 07.2025
<ul style="list-style-type: none">Topic: <i>The role of excited states in strong field ionization</i>Focus on the influence of excited states on the ionization dynamics of atoms in strong laser fieldsExperience with Python, C++, Mathematica	
Tutor for Physics and Mathematics at LMU Munich	09.2024 - 02.2025
<ul style="list-style-type: none">Tutor for the courses Mathematical Methods for Physicists and <i>Mathematical preparation for Physicists</i>Preparing and holding tutorials for approx. 20 students (including grading of exercises)	
Research Assistant at Max Planck Institute of Quantum Optics	05.2024 – 08.2024
<ul style="list-style-type: none">Assisted in attosecond spectroscopy and theoretical strong field physics research, focusing on the reconstruction of strong-field ionization dynamics from numerically determined ionization probabilitiesUtilized the C++ programm <i>tRecX</i> for simulating and solving time-dependent partial differential equations, including convergence testingCompared theoretical models implemented in Python with simulated data, using sampling method <i>TIPTOE</i>Expected co-authorship of a publication based on research results	
Study-related physics internship at LMU Munich	02.2023 - 08.2024
<ul style="list-style-type: none">Topics: Quantum Mechanics, Optics and Lasers, Mechanics, Experience with Python, C++, Matlab, Mathematica	

SKILLS

Computer	Python (pandas, plotly, scipy, numpy), C++, Mathematica, Linux, Numerical Simulations
Languages	English (TOEFL C1), German (Native), French (B1)

INTERESTS

Music	Saxophone, Clarinet and Guitar
Sports	Fitness, table tennis, jogging, tango argentino

¹Courses marked with *: Coursework including excercises completed, examinations were either not attempted, or not passed.

²Not completed, withdrawn after the 4th semester