

KONRAD WEHKAMP

CURRICULUM VITAE



PROFILE

Master's student in Physics and Technology for Space Applications specializing in spacecraft propulsion, with hands-on experience in ion thruster characterization, plasma simulation, and experimental research.

LANGUAGE SKILLS

German: native speaker **C2**



English: fluent **C1**



French: basic knowledge **B1**



IT SKILLS

Python: advanced

C++: intermediate

LabVIEW: intermediate

CAD (Inventor): intermediate

MS Office / LaTeX / Origin: advanced

GitHub: github.com/konradweh

INTERESTS

Creative projects (electronics, 3D printing, woodworking)

Field hockey and Bouldering

VOLUNTEER EXPERIENCE

Coach and organizer of an inclusive hockey team for athletes with disabilities since 2021.

C-level coaching license, responsibility for training and team development.

EDUCATION

Justus Liebig University Giessen

M.Sc. Physics and Technology for Space Applications
Focus on spacecraft propulsion, plasma physics, and space systems engineering

04.2025 – present
(parallel enrollment)

Justus Liebig University Giessen

B.Sc. Physics and Technology for Space Applications

Final grade: 1.9

Bachelor's thesis: Emittance measurements on reference ion sources for electric propulsion characterization (Ref4EP project)

10.2021 – 04.2026

Hands-on work with ion sources, beam diagnostics, and performance evaluation methods

Karl-Rehbein-Gymnasium Hanau

German university entrance qualification, grade: 1.7

07.2021

Honors for outstanding achievement in Physics

RELEVANT PROJECTS & EXPERIENCE

GSI HELMHOLTZ CENTRE FOR HEAVY ION RESEARCH

Internship

Work on the SHIPTRAP experiment, including the design and integration of a cooling system for analogue components

07.2025 – 10.2025

ION THRUSTER RESEARCH GROUP – JLU GIESSEN

Student Researcher

Conducted plasma measurements and diagnostics in the context of electric propulsion research

Supported experimental investigations using THz time-domain spectroscopy (THz-TDS)

04.2023 – 10.2023

Gained experience in laboratory workflows, data evaluation, and experimental validation

Project Work

Developed a global Python-based model for multi-species plasmas in a small team

Used the model to study plasma behavior relevant to electric propulsion systems

Strengthened skills in numerical modeling, validation and scientific programming

10.2024 – 04.2026

Project Work

Developed a Python-based simulation of atmospheric reentry for different space vehicles

Modeled key physical effects including aerodynamic forces, thermal loads, and flight dynamics

10.2025 – 04.2026

Strengthened skills in multi-physics modeling, numerical methods and scientific programming