

# KONRAD WEHKAMP

## CURRICULUM VITAE



### PROFILE

Master’s student in Physics and Technology for Space Applications with a strong focus on propulsion testing, experimental research, and hardware-oriented development in laboratory environments.

### 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](https://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  
Honors for outstanding achievement in Physics  
07.2021

### RELEVANT PROJECTS & EXPERIENCE

**GSI HELMHOLTZ CENTRE FOR HEAVY ION RESEARCH**  
**Internship**  
Designed and integrated a cooling solution for analogue electronics used in the SHIPTRAP  
Supported the integration and operation of experimental hardware in a high-vacuum and radiation-exposed environment  
07.2025 – 10.2025  
Performed hands-on assembly, maintenance, and troubleshooting of experimental components, including work on the electron gun at the target area

**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

**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  
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