# KONRAD WEHKAMP
## CURRICULUM VITAE

### PROFILE

Master's student in 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

### INTERESTS

Field hockey and Bouldering

Creative projects (electronics, 3D printing, woodworking)

### VOLUNTEER EXPERIENCE

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

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

### EDUCATION

**Justus Liebig University Giessen**
M.Sc. Physics and Technology for Space Applications.

04.2025 – present (parallel enrollment)

Focus on spacecraft propulsion, plasma physics, and space systems engineering.

**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. 10.2021 – 04.2026

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

### RELEVANT PROJECTS & EXPERIENCE

#### 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.

Used the model to study plasma behavior relevant to electric propulsion systems. 10.2024 – 04.2026

Strengthened skills in numerical modeling, validation, and scientific programming.

**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.

#### GSI HELMHOLTZ CENTRE FOR HEAVY ION RESEARCH

**Internship**
Work on the SHIPTRAP experiment, including the design of a cooling system for analogue components. 07.2025 – 10.2025