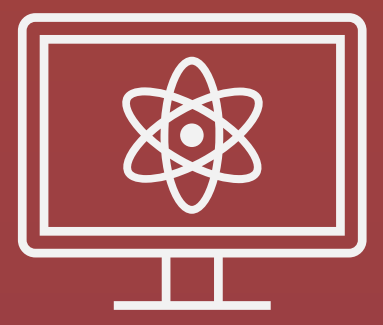


COURSE



Quantum Sensor Engineering

- Quantum magnetometry
- Lab techniques and safety
- SQUID-magnetometer
- NV-Center-magnetometer
- OPM-magnetometer

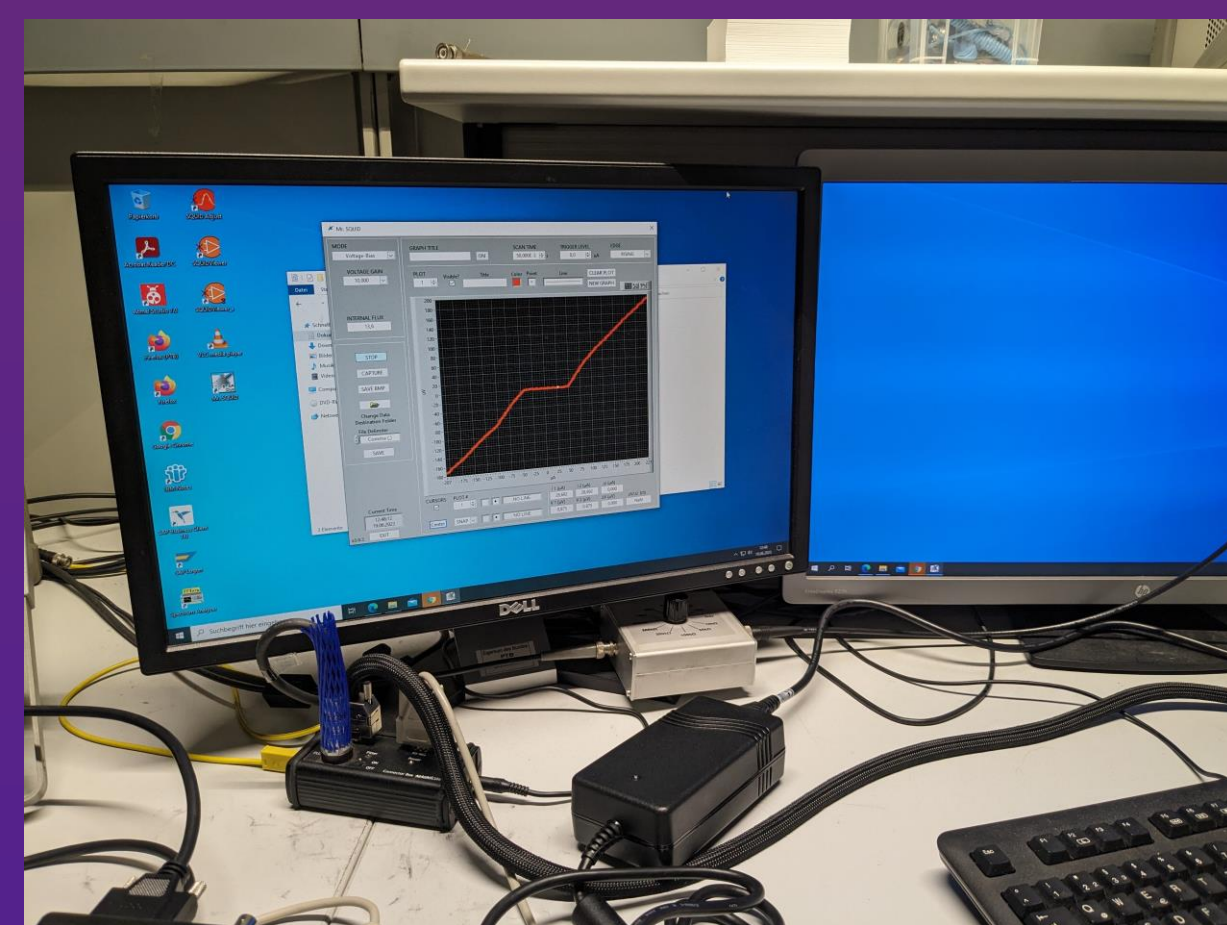
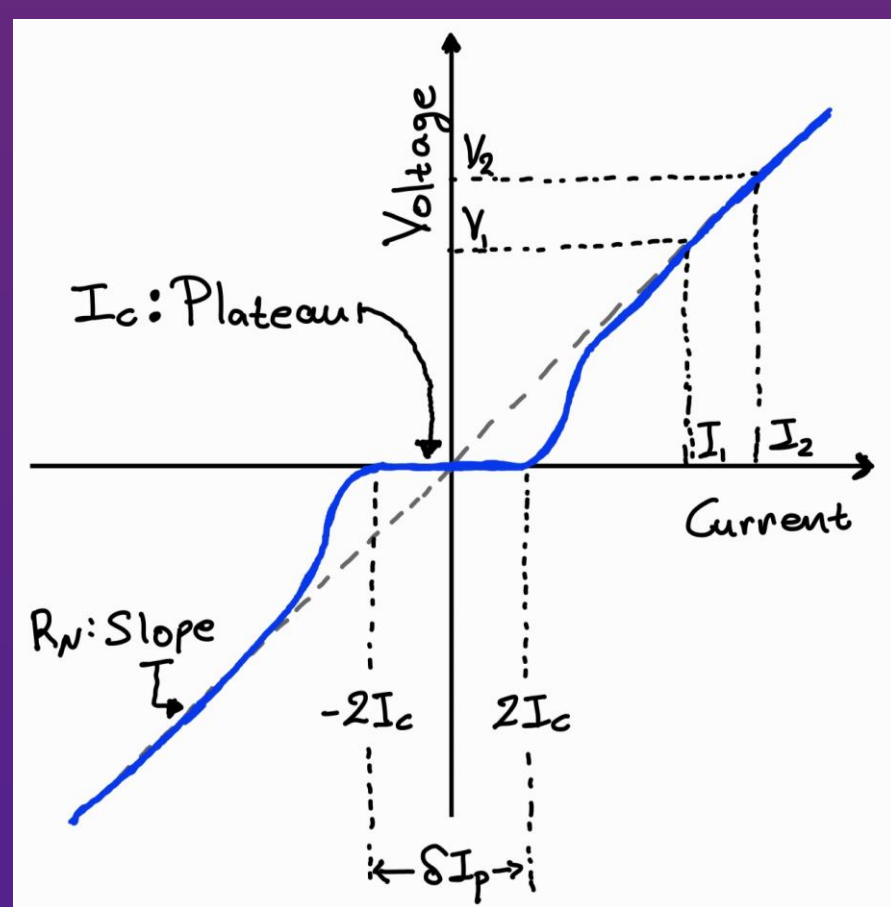
SHOWCASE

SQUID-Magnetometry

- Basics on superconductivity
- Hands-on training with “Mr. SQUID®”
- The $V - I$ curve

DESCRIPTION

In this part of the course, we focus on practical training with “Mr. SQUID®”. With the means of simple experiments, participants acquire a basic understanding about superconductors, their electronic properties and how these can be used to build on of the most sensitive magnetometers on earth.



INSTRUCTOR

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MODULE

Hands-on lab on Magnetic Field Quantum Sensors based on superconductivity

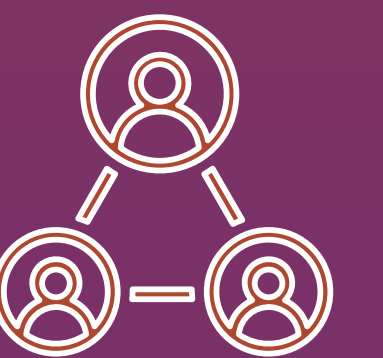
- Lab techniques, dealing with cryogenic-gases
- Theoretical background of superconductivity
- Hands-on training with the “Mr. SQUID®” kit



AUDIENCE

Our course would be interesting for

- Engineers
- Biologists
- Geologists
- Metallurgists
- Medical technicians



LEARNING OUTCOME

Participants will learn about

- Lab and Shielding techniques
- Quantum magnetometry
- Types of Quantum magnetometers
- Capabilities and limitations
- Use cases



DURATION



Module duration 1 week
 Course duration 2 weeks