Welcome in the Master programme

Prof. Axel Görlitz, HHU Düsseldorf

09.10.2026

Master Programme in Physics

Website:

- https://physik.hhu.de

VPN with MFA

- https://wiki.hhu.de/spaces/ZIM/pages/586088693/VPN+mit+MFA+einrichten

E-Mail:

- Please uses your HHU-E-Mail-address: first_name.family_name@hhu.de
- https://www.zim.hhu.de/servicekatalog/werkzeuge-fuer-alle/e-mail

Online schedule and registration:

- Until15th November: LSF (https://lsf.uni-duesseldorf.de/)
- From 14th December: https://digstu.hhu.de

Master Programme in Physics

Exam registration and academic records

- From 14th December: https://digstu.hhu.de

E-Learning Platform ILIAS

- https://ilias.hhu.de

Video conference system - Webex

- https://wiki.hhu.de/spaces/ZIM/pages/511378524/Videokonferenzen+Webex
- available for all students

Master Programme in Physics

MSc in Physics - Study Programme			
1. Semester	**2. Semester**	**3. Semester**	**4. Semester**
Focus Area 1 (12 LP)		Specialization (15 LP)	Final Seminar (3 LP)
Focus Area 2 (12 LP)			Master Thesis (30 LP)
Elective Physics (36 LP)			
Elective General (12 LP)			

Physics Focus (Schwerpunkt)

- Plasma Physics, Quantum Optics and Quantum Information, Solid State Physics, Soft Matter Physics, Biophysics
- Two focus areas (12 ECTS each) have to be chosen
- In each focus area one experimental (type A) and one theoretical (type B) module (6 ECTS each) have to be chosen
- It is guaranteed that in all focus areas lectures of type A and type B are held regularly (i. e. once per academic year)
- Course enrollment at LSF (lsf.hhu.de)

Physics Focus (Schwerpunkt)

Schedule of lectures in the focus areas	
WS 2026/27	SS 2027
Experimental Plasma Physics (A)	Experimental Quantum Optics (A)
Theoretical Plasma Physics (B)	Theoretical Quantum Optics (B)
Experimental Soft Matter (A)	Theoretical Soft Matter (B)
Semiconductor Devices (A)*	Theoretical Solid State Physics (B)
Experimental Biophysics (A)	Theoretical Biophysics (B)

*additional lectures in experimental solid state physics may be offered in the summer term 2027

Elective Physics Modules (Wahlpflichtbereich Physik)

- Focus modules, Laser Physics, Astrophysics, Computational Physics, Numerical Simulations, Advanced Quantum Mechanics, …
- Modules with a total of 36 credit points have to be chosen
- Course enrollment at LSF (lsf.hhu.de)
- Handbook of Modules lists courses that are generally offered

Elective Physics Modules (Wahlpflichtbereich Physik)

Modules that can be chosen as elective physics module in WS 2026/27	
all focus modules (if not used in focus area)	
Astrophysics	Physics with Trapped Charged Particles
Quantum Technology	Modern Methods of Data Analysis in Experimental Physics
Laser-Plasma Diagnostics	Ultrafast Optics
Sun, Coal, Nuclear Fusion	Nonlinear Optics
Advanced Scientific Simulations	Computational Physics
Nonequilibrium Superconductivity	Fundamentals of Medical Physics (Grundlagen der Medizinphysik – Deutsch)
Imaging Techniques I	X-Ray Physics
Theoretical Atomic Physics	Quantum Field Theory
Seminars	Lab courses

Elective modules (Wahlbereich)

- Any university course including physics modules.
- Advanced Mathematics, Chemistry, more Physics courses (typically in German).
- Transferable skills, language courses (http://www.studierendenakademie.hhu.de),...
- Graded courses/modules count for final grade.

2nd year of Master Programme

Specialization

- Training for Master thesis
- 15 Credit Points

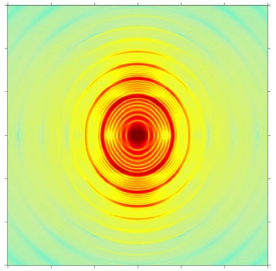
Final Seminar

- Presentation of Master thesis
- 3 Credit Points

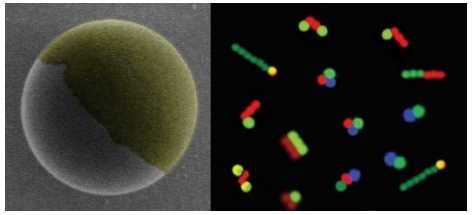
Master thesis

Research work in one of our primary research areas:

- Plasma Physics
- Soft Matter
- Solid State Physics/Nano Physics
- Quantum Optics/Quantum Information
- Medical Physics/Biophysics



(AG Müller)



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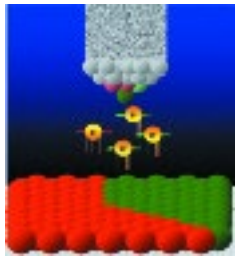

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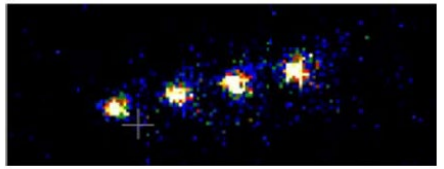

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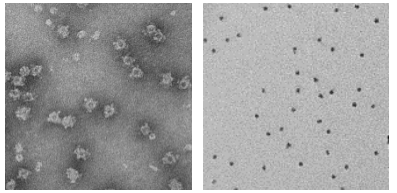

Exams

- Cover entire moduls
- Oral exams (date of exam are individually arranged with the examiner) or written tests (fixed date)
- Registration: 1 week before exam; online-registration (at digstu.hhu.de)
- **Exception** - seminars: registration with professor
- **Exception** - directed study: registration with professor

Contact

Student Advisor (new): Prof. Hermann Kampermann

studienberatung.physik@hhu.de

General Information for international students at HHU:

www.hhu.de/en/international