

Welcome in the Master programme

Prof. Axel Görlitz, HHU Düsseldorf

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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)			

- 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.uni-duesseldorf.de)

Physics Focus (Schwerpunkt)

Schedule of lectures in the focus areas	
SS 2021	WS 2021/22
Experimental Quantum Optics (A)	Experimental Plasma Physics (A)
Theoretical Quantum Optics and Quantum Information (B)	Theoretical Plasma Physics (B)
Theoretical Soft Matter (B)	Experimental Soft Matter (A)
Theoretical Solid State Physics (B) Quantum Dots (A)	Semiconductor Devices (A)
Theoretical Biophysics (B)	Experimental Biophysics (A)

*additional lectures in experimental solid state physics may be offered in the winter term 2021/22

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.uni-duesseldorf.de)
- [Handbook of Modules](#) lists courses that are generally offered

Elective modules (Wahlbereich)

- Any university course including physics modules.
- Language courses (www.deutschkurse.de, <http://www.spz.hhu.de>), advanced Mathematics, Chemistry, more Physics courses, transferable skills (<http://www.studierendenakademie.hhu.de>),...
- 1st year courses of the Bachelor programmes in physics or mathematics are excluded.
- Credit points for Bachelor courses of other disciplines may be reduced (please ask examination board (Prof. Getzlaff)).
- Graded courses/modules count for final grade.

Specialization

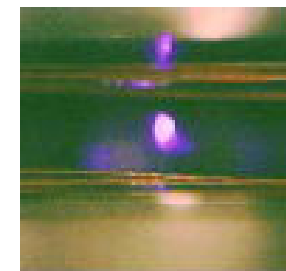
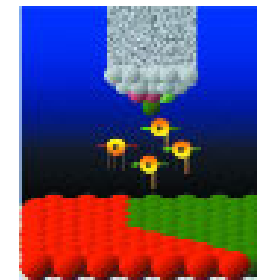
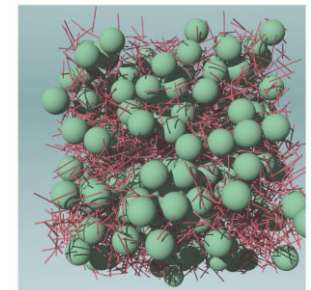
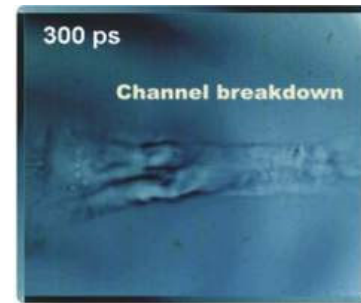
- Training for Master thesis
- 15 Credit Points

Final Seminar

- Presentation of Master thesis
- 3 Credit Points

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



- Cover entire moduls
- Oral exams (date of exam may be individually arranged) or written tests (fixed date)
- Registration: 1 weeks before exam; this applies also for Bachelor students who already take Master's courses; online-registration (in the Studierendenportal) for written exams and paper-based registration (at Examination office) for oral exams
- **Exception** – seminars: registration with professor
- **Exception** - directed study: registration with professor

Contact

Student Advisor: Prof. Axel Görlitz
(Contact hours: when the office door is open)

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