

Winter semester 2024/25: Master QTEC – LUH modules

Subject to change without notice. Please check institute websites and course catalogue before the semester starts. If you want to take part in the courses, please contact the responsible professors in advance!

Module (German)	Responsible	Course	Credits	Module (English)	Weekday	Time	Room	Remark
Computational Methods, Simulations & Experimental Control	Piet Schmidt	Praktikum Computational Methods, Simulations & Experimental Control	5	Computational Methods, Simulations & Experimental Control	by arrangement			
Seminar	Piet Schmidt, Tanja Mehlstäubler	Seminar Quantum technologies with laser cooled ions and atoms	3	Seminar	by arrangement			
Quantenoptik	Piet Schmidt, Tanja Mehlstäubler	VL Quantenoptik	5	Quantum Optics	Tuesday (bi-weekly)/ Wednesday	12:15-13:45	1101 - B302/ 1101 - F342	
		Ü Quantenoptik			Monday/ Tuesday (bi-weekly)	16:15-17:45/ 12:15-13:45	1101 - A410/various	
Fortgeschrittene Festkörperphysik	Fei Ding	VL Fortgeschrittene Festkörperphysik	5	Advanced Solid State Physics	Tuesday/Wednesday	10:15-11:45	3701 - 268	
	Michael Zopf	Ü Fortgeschrittene Festkörperphysik			Thursday	12:00-14:00	3701 - 268	
Photonik	Boris Chichkov	VL Photonik	5	Photonics	Monday	10:15-11:45	1101 - F303	
		Ü Photonik			Thursday	8:15-9:15	1101 - F442	
Nichtklassisches Licht und Nichtklassische Laserinterferometrie	Michèle Heurs	VL Nichtklassisches Licht	5	Nonclassical Light and Nonclassical Laserinterferometry	Tuesday	10:00-12:00	3401 - 103	5 credits have to be achieved in the entire module, therefore the lecture Nichtklassische Laserinterferometrie has to be attended in the summer semester.
Optische Experimente und ihre Kontrolle	Benno Willke	VL Laserstabilisierung und Kontrolle optischer Experimente	5	Optical Experiments and their Control	Thursday	10:00-12:00	3401 - 103	5 CP must be achieved in the entire module, therefore the lecture Elektronische Metrologie im Optiklabor must be attended in the summer semester
Quantendynamik und theoretische Quantenoptik	Manfred Lein	VL Theoretische Quantenoptik und Quantendynamik	5	Quantum Dynamics and Theoretical Quantum Optics	Thursday/Friday	9:00-11:00/ 14:00-16:00	3701 - 269	5 CP must be achieved in the entire module, therefore the seminar Quantum Dynamics must be attended in the summer semester
Experimental Methods Atomic Physics	Sven Abend, Ernst Rasel	VL Experimental Methods Atomic Physics	5	Experimental Methods Atomic Physics	Wednesday	14:15-15:45	1101 - B302	
		Ü Experimental Methods Atomic Physics			Tuesday	12:15-13:45	NN	
Quantensensorik	Naceur Gaaloul, Ernst Rasel	VL Matter wave interferometry	5	Quantum Sensing	Tuesday	15:30-16:45	1101 - D326	
	Piet Schmidt, Christian Lisdat	VL Optical Clocks			Wednesday	15:00-17:00	HiTec - 317	
Quantenkommunikation	Klemens Hammerer	VL Quanteninformation	?	Quantum Communication	Monday	12:00-14:00	3701 - 268	
Quantenmetrologie und -sensorik	Piet Schmidt, Christian Lisdat	VL/Ü Optical Clocks	5	Quantum Metrology and Sensing	Wednesday	15:00-17:00/ 17:00-18:00	HiTec - 317	
Spezialisierung Quantencomputing	Anas Abdelwhab Mohammed	VL/Ü Computational methods for quantum correlated systems	6	Specialisation Quantum Computing	Monday/Thursday	16:00-18:00/ 14:00-16:00	3701 - 269	
Spezialisierung Quantenphysik	Gleb Kotoousov	VL/Ü Quantenfeldtheorie	5	Specialisation Quantum Physics	Monday/Friday	14:00-16:00/ 12:00-14:00	3701 - 268	
Spezialisierung Quantenphysik	Martin Plávala, Robert Raußendorf	VL Quantum Nonlocality	3	Specialisation Quantum Physics	Tuesday	12:00-14:00	3701 - 268	