

Specialization Area Nuclear and Particle Physics

Vertiefungsgebiet Kern- und Teilchenphysik

Specialization:	Nuclear and Radiation Physics Particle Beam Physics	Experimental Particle Physics	Theoretical Particle Physics	SWS	Type
Summer Semester					
B6 oder M	Vertiefende Grundlagen der Teilchenphysik (D)			3+1	VW
B6 oder M	Detectors for Radiation and Particle Physics (E)			3+1	VW
B6 oder M	Physics of Particle Accelerators (E)			2+1	VW
B6 oder M	Physics with Neutrons (E)			2+1	VW
B6 oder M	Nuclear Astrophysics (E)			2+1	VW
B6 oder M	Accelerator Mass Spectrometry (E)			2+1	VW
M	Cosmology (E)			2+1	VWm
M	Advanced Topics of QCD and Electroweak Theory (E)			3+1	VWm
Lab Courses					
M	Advanced Lab Course Nuclear and Particle Physics		Quantum Field Theory Lab Course	4	VW VW
Winter Semester					
B6 oder M	Applied Radiation Physics (E)			2+1	VW
M	Neutrino Physics (E)			2+1	VWm
M	Higgs and Beyond Standard Model Physics (E)			2+1	VWm
M	Quantenfeldtheorie für Teilchenphysiker (D)			3+1	VWm
B5 oder M	Nuclear Physics: Fundamentals and Applications (E)			2+1	VW
B5 oder M	Statistical Methods of Data Analysis (E)			2+1	VW
Lab Courses					
M	Advanced Lab Course Nuclear and Particle Physics		Quantum Field Theory Lab Course	4	VW VW

Bn: Bachelor, semester number "n"

M: Master

SWS: weekly semester hours (Semesterwochenstunden)

VW: specialization topic (Wahlfach Vertiefung)

VWm: specialization topic, preferentially for Master course

	Fundamental courses recommended for all research areas of the IKTP
	Specialisation or dedicated research area of the IKTP
	Lab Course

These are recommendations for the specialization area "Nuclear and Particle Physics".

All physics students are free to chose a valid combination of other courses and labs.