

Module title		Abbreviation
Experimental Particle Physics		11-TPE-Int-201-m01
Module coordinator		Module offered by
Managing Director of the Institute of Applied Physics		Faculty of Physics and Astronomy
ECTS	Method of grading	Only after succ. compl. of module(s)
6	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
Physics with modern particle physics detectors at the LHC and at the Tevatron. Discovery of the Higgs Boson. Determination of the W boson and Top Quark mass. Measurement of standard model parameters. Search for physics beyond the standard model.		
Intended learning outcomes		
Familiarity with the basic questions studied with a modern particle physics detector, and with modern data analysis techniques in particle physics. Ability to put results into context and to assess their systematic uncertainties.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (3) + R (1) Module taught in: English		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English		
Allocation of places		
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Additional information		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Master's degree (1 major) Physics International (2020)		