Degree: **M.Sc. in Physics (PO von 2006)**

Module No.: physics610
Credit Points (CP): 12
Category: Elective
Semester: 7.

Fachgruppe
Physik und Astronomie
Universität Bonn

Module: Specialization I

Module Elements:

Nr.	Course Title	Number	CP	Type	Workload	Sem.
Particle Physics						
1.	Particle Physics	physics611	6	Lect. + ex.	180 hrs	WT
2.	Accelerator Physics	physics612	6	Lect. + ex.	180 hrs	WT
3.	Physics of Particle Detectors	physics618	6	Lect. + ex.	180 hrs	WT
Condensed Matter and Photonics						
1.	Condensed Matter Physics	physics613	6	Lect. + ex.	180 hrs	WT
2.	Laser Physics and Nonlinear Optics	physics614	6	Lect. + ex.	180 hrs	WT
3.	Applied Photonics	physics619	6	Lect. + ex.	180 hrs	WT
Theoretical Physics						
1.	Theoretical Particle Physics	physics615	7	Lect. + ex.	210 hrs	WT
2.	Theoretical Hadron Physics	physics616	7	Lect. + ex.	210 hrs	WT
3.	Theoretical Condensed Matter Physics	physics617	7	Lect. + ex.	210 hrs	WT

Requirements:

Preparation:
See with the description of the course

Content:
Teaching of advanced fundamentals of physics from two research areas of physics in Bonn

Aims/Skills:
The students will get acquainted with two research topics of today

Form of Testing and Examination:
Requirements for the submodule examination (written or oral examination): successful work with exercises

Length of Module: 1 semester

Maximum Number of Participants: ca. 100

Registration Procedure:
s. https://basis.uni-bonn.de u. http://bamawww.physik.uni-bonn.de

Note: The student must achieve 12 CP from two different specialization areas (Particle Physics; Condensed Matter and Photonics; Theoretical Physics)