Module: Experimental aspects of particle physics (**PHY822**)				
Degree program: Physics (M.Sc.)				
Frequency in SS	**Duration** 1 semester	**Semester** 2nd sem.	**Credits** 6	**Work load** 120 h

1	**Module structure**				
	No.	**Element / course**	**Type**	**Credits**	**Contact hours per week**
	1	Lecture	L	3	2
	2	Exercise	T	3	2
2	**Language:** English				
3	**Content** Experimental aspects of particle physics with varying focus, e.g. searches for new phenomena, precision measurements, current and future experiments. Basic experimental methods in accelerator-based particle physics.				
4	**Learning outcome** This subject focus on experimental techniques necessary to perform measurements in the field of particle physics. Students will learn in-depth aspects in the subject area, with particular attention to data analysis. They will acquire the necessary knowledge and skill to treat complex measurements and systematics effects. In addition to professional training, at the end of the course, students will be able to read critically original literature.				
5	**Examination** Coursework: Active participation in the exercise sessions. Graded module examination (oral or written)				
6	**Participation Requirements**				
7	**Module type** Elective module				
8	**Responsible** Dean of the Department of Physics		**Faculty in charge** Department of Physics		