Supersymmetry (T) - physics761

Degree - M.Sc. in Physics (PO von 2014)

Module	**Elective Advanced Lectures: Theoretical Physics**
Module No.	physics70c

Course	**Supersymmetry (T)**
Course No.	physics761

Category	**Type**	**Language**	**Teaching hours**	**CP**	**Semester**
Elective	Lecture with exercises	English	3+1	6	WT/ST

Requirements for Participation: Quantum Field Theory I

Preparation:

Form of Testing and Examination: Individual Oral Examinations

Length of Course: 1 semester

Aims of the Course: Teach the students the basics of supersymmetric field theory and how it can be tested at the LHC.

Contents of the Course: Superfields; Supersymmetric Lagrangians; MSSM; Testing the MSSM at the LHC

Recommended Literature:

Theory and phenomenology of sparticles: An account of four-dimensional N=1 supersymmetry in high energy physics.

M. Drees, (Bonn U.) , R. Godbole, (Bangalore, Indian Inst. Sci.) , P. Roy, (Tata Inst.) . 2004. 555pp.

Hackensack, USA: World Scientific (2004) 555 p.

Weak scale supersymmetry: From superfields to scattering events.

H. Baer, (Florida State U.) , X. Tata, (Hawaii U.) . 2006. 537pp.

Cambridge, UK: Univ. Pr. (2006) 537 p.