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

**Modules:**
- physics700 Elective Advanced Lectures
- physics710 Experimental Physics
- physics720 Applied Physics

**Course:**
Hands-on Seminar: Experimental Optics and Atomic Physics (E/A)

**Course No.:** physics740

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**Requirements:**

**Preparation:**
Fundamentals of optics and quantum mechanics

**Form of Testing and Examination:**
Credit points can be obtained after successful carrying out the experiments and preparing a written report on selected experiments

**Length of Course:**
1 semester

**Aims of the Course:**
The students learn to handle optical setups and carry out optical experiments. This will prepare participants both for the successful completion of research projects in experimental quantum optics/photonics and tasks in the optics industry.

**Contents of the Course:**
Practical training in the field of optics, where the students start their experiment basically from scratch (i.e. an empty optical table). The training involves the following topics:
- diode lasers
- optical resonators
- acousto-optic modulators
- spectroscopy
- radiofrequency techniques

**Recommended Literature:**
Will be given by the supervisor

November 2009