

**Secondary Area of Specialization**

**Quantum Optics and  
Optical Condensed Matter Physics (Bonn)**

status quo 08.05.2012

**General Information**

The lectures of this subject are usually taught at Bonn University but the credit points are recognized for the Master of Physics in Cologne either as a Secondary Area of Specialization (Physikalisches Nebenfach, 8 credit points) or as one of the Elective Subjects (Wahlfach Master, 4-12 credit points such that both Elective Subjects cover together 16 credit points). The credit points for the second Elective Subject have to come from a different subject. Within the Bonn Cologne Graduate School of Physics and Astronomy also joint lectures or video transmission of lectures are organized.

**Contents**

For introduction, the lectures Laser Physics and Nonlinear Optics, physics614, and Applied Photonics, physics619, are strongly recommended.

**Literature**

See description of lectures

**Organization**

See rules for examinations below.

**Examinations**

Each lecture is a separate course with a separate examination at Bonn University. Details and the format of the examination are given in the description of each lecture. The credit points and marks of examinations are recognized for the Master of Physics at Cologne University as a Secondary Area of Specialization (8 credit points) or as one of the Elective Subjects (4-12 credit points such that both Elective Subjects cover together 16 credit points). The credit points for the second Elective Subject have to come from a different subject.

**Aims**

Knowledge of quantum optics and photonics

**Prerequisites for Participation**

See description of lectures

**Prerequisites**

See description of lectures

**Frequency**

See description of lectures

**Soft Skills**

See description of lectures

**Use in Other Courses of Study**

None

**Coordinators**

Head of the examination board Master