# **Block Seminar: Presentations of Optics Lab Projects 2016/2017**

# 20 minutes talk and 10 minutes discussion

Thursday 16.02.2017 Room: NEW 15 1'404

Time	Name	Topic
11:00	Sakshi Sharma	Up-conversion Nanoparticles
11:30	Nicola Mayer	Confinement-induced resonances:
		two particles in a box

Monday 06.03.2017 Room: NEW 15 3'101

Time	Name	Topic
10:00	Monica Pons	Up-conversion Nanoparticles
10:30	Zhu Xiaohui	Dark field imaging in color
11:00	Malte Smoor	Probing atomic absorption of Rb and laser
		stabilization
11:30-		Coffee break
11:45		
11:45	Christos	Digital steering electronics for frequency stabilised
	Mourikis	laser systems
12:45	Dmitry	Piezo-electric step actuators for steering laser
	Smirnov	beams
13:15-		Lunch break
14:15		
14:15	Esteban Gomez	Ultrafast pump-probe experiments on saturable
	Lopez	optical media
14:45	Sam Fairman	Implementation of a measurement system for
		few-cycle laser pulses based on FROG
15:15	Alsu Zubairova	Theory of high harmonic generation

## 1. Ultrafast pump-probe experiments on saturable optical media

Supervisor: Thomas Elsässer (MBI) Student: **Esteban Gomez Lopez** 

### 2. Probing atomic absorption of Rb and laser stabilization

Supervisor: Oliver Benson / Oliver Neitzke (HU)

Student: Malte Smoor

# 3. Dark field imaging in color

Supervisor: Oliver Benson / Martin Rothe (HU)

Student: Zhu Xiaohui

# 4. Digital steering electronics for frequency stabilised laser systems

Supervisor: Markus Krutzik (HU) Student: **Christos Mourikis** 

### 5. Up-conversion Nanoparticles

Supervisor: Ute Resch-Genger / Florian Frenzel (BAM)

Students: Monica Pons & Sakshi Sharma

### 6. Piezo-electric step actuators for steering laser beams

Supervisor: Achim Peters (HU) Student: **Dmitry Smirnov** 

### 7. Implementation of a measurement system for few-cycle laser pulses based on FROG

Supervisor: Nickolai Zhavoronkov (MBI)

Student: Sam Fairman

# 8. Theory of high harmonic generation

Supervisor: Misha Ivanov (MBI / HU)

Student: Alsu Zubairova