



# Seminarankündigung

**Dienstag, 21. April 2015  
13:00 Uhr**

**ZNN, Seminarraum EG 0.001**

## **“Coupling effects in photonic metamaterials and plasmonic nanostructures”**

Metamaterials have added new and fascinating effects to optics and photonics, e.g., magnetism at optical frequencies, negative index materials, and strong chirality. In most cases, these properties result from the excitation of localized plasmonic modes in the elementary building blocks of the photonic metamaterial, i.e., the metaatoms. A qualitative first understanding of the features of a given metamaterial can be often obtained by considering the plasmonic resonances of an isolated metaatom. However, electromagnetic interactions between the metaatoms can have a significant impact on the properties of the metamaterial. In this presentation, we will discuss several recent experiments which underline the importance of coupling effects in photonic metamaterials and plasmonic nanostructures.

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