Math.-Nat. Sektion FB Physik





## Nonlinear, Tunable and Light-Emitting

## **All-Dielectric**

## **Metasurfaces**

Optically resonant dielectric metasurfaces have been established as a versatile platform for manipulating light fields at the nanoscale. While initial research efforts were concentrated on purely passive structures, alldielectric metasurfaces also hold a huge potential for dynamic control of light fields, as well as for tailoring light emission processes, such as spontaneous emission and nonlinear frequency generation. This talk will review our recent advances in nonlinear, tunable and light-emitting all-dielectric metasurfaces, and outline future research directions for hybrid solid-state systems based on resonant photonic nanostructures.

Prof. Dr. Isabelle Staude, Friedrich-Schiller-Universität Jena room P 603, Thu. 02.05.2019, 15:15