



Münchner Physik- Kolloquium

Winter
2018/19

Plasmonics – hot fields and hot electrons

Prof. Dr. Stefan Maier, *Fakultät für Physik, LMU München*

Monday, 4 February 2019, 17:15 h

Hörsaal 2, Physik-Department der TUM, James-Franck-Straße 1, Garching

Plasmonics enables light harvesting and the tight confinement of electromagnetic fields to the nanoscale, which has been exploited in many areas of nanophotonics such as surface-enhanced sensing and the enhancement of nonlinear processes on the nanoscale. Here I will focus on what happens when localized surface plasmons decay, leading to the generation of energetic, out-of-equilibrium electron/hole pairs. Plasmonic nanostructures can thus be seen as nanoscale energy converters from solar into chemical energy. The fundamentals of this process as well as applications in catalysis and molecular self-assembly will be presented.

Student event: Meet the speaker

We invite you to a **student-only** discussion-round with Prof. Dr. Stefan Maier before his Munich Physics Colloquium talk.

Be curious and feel free to ask any question.

Monday, 4 February 2019, 16:00 h

Seminar room PH 3268 (upper floor, new location!), Physik-Department der TUM, James-Franck-Straße 1, Garching

