



Seminarankündigung

**Freitag, 28. Juni 2019
11:00 Uhr**

WSI, Seminarraum S 101

“The power of light – pushing the limits of solar energy conversion”

Abstract: Current energy production methods require a revolutionary shift away from historical, unsustainable practices. Technologies which harvest and convert sunlight to electricity are on the brink of creating such a revolution. The Saive research group develops light management strategies implementing realistic solar irradiance conditions, that drive conversion efficiency of photovoltaic devices toward their upper limits. Our main focus areas are development of effectively transparent front contacts and design of ideal albedo materials for bifacial solar power plants. The former enhances power conversion efficiency of almost all types of solar cells by mitigating shading losses related to electrical front contacts. In the second focus, the optical environment of solar power plants is designed to redirect light towards the solar modules. In addition to our work on photovoltaic energy conversion, we are developing hybrid devices in which light energy is directly transformed into mechanical energy.

**Prof. Dr. Rebecca Saive
Asst. Professor of Applied Physics/Nanophotonics
University of Twente
MESA+ Institute for Nanotechnology
Complex Photonic Systems (COPS)
Enschede, The Netherlands**