



e-conversion



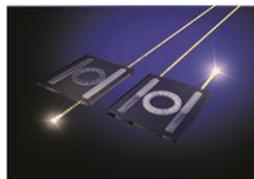
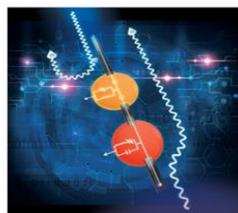
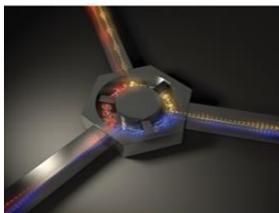
Seminarankündigung

**Dienstag, 3. September 2019
14:00 Uhr**

WSI, Seminarraum S 101

“New frontiers for wave manipulation using metamaterials”

Metamaterials are artificial materials with properties well beyond what offered by nature, providing unprecedented opportunities to tailor and enhance the control of waves. In this talk, I discuss our recent activity in electromagnetics, nano-optics and acoustics, showing how suitably tailored meta-atoms and their arrangements open exciting venues for scattering manipulation and non-invasive sensing, metasurfaces for wavefront manipulation and analog computing, nonreciprocity and topological phenomena induced by spatio-temporal modulation, opto-mechanical phenomena or nonlinearities, and giant nonlinear and quantum effects at subwavelength scales. Physical insights into the underlying physics and new technology based on these concepts will be presented and discussed.



Andrea Alù is the Founding Director and Einstein Professor at the Photonics Initiative, CUNY Advanced Science Research Center. He received his Laurea (2001) and PhD (2007) from the University of Roma Tre, Italy, and, after a postdoc at the University of Pennsylvania, he joined the faculty of the University of Texas at Austin in 2009, where he was the Temple Foundation Endowed Professor until Jan. 2018. Dr. Alù is a Fellow of IEEE, OSA, SPIE and APS, a Highly Cited Researcher since 2017, a Simons Investigator and has received several scientific awards, including the Vannevar Bush Faculty Fellowship from DoD (2019), the ICO Prize in Optics (2016), the NSF Alan T. Waterman award (2015), the OSA Adolph Lomb Medal (2013), and the URSI Issac Koga Gold Medal (2011).

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