

Universität Bern
Institut für Angewandte Physik
Sidlerstrasse 5
3012 Bern
Schweiz

Telefon: +41 (0)31 631 89 11
Telefax: +41 (0)31 631 37 65
E-Mail: IAPemail@iap.unibe.ch
WWW: <http://www.iap.unibe.ch/>

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**UNIVERSITÄT
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Seminar über Microwavephysics and Atmospheric Physics

Referent: Dr. Suchitra Ramani, Los Alamos National Laboratory, New Mexico, USA

Titel: Unexpected behavior in resonant structures undergoing free space THz and GHz excitation

Finite metamaterial arrays with varying split ring resonator sizes were excited in the Kretschmann ATR configuration using finite sized terahertz beams. The intent was to explore the behavior of two-dimensional planar metamaterials or metafilms and understand the various excitation schemes for application of metafilms to Terahertz-Attenuated Total Reflection spectroscopy (THz-ATR). The ATR measurements on metafilms with closely spaced rings showed an anomalous edge enhancement when the metafilm sample was illuminated near the edge. More recent work in the GHz regime investigating the relationship between highly-moded excitation (mode stirred chamber) and plane wave excitation (anechoic chamber) on slotted cylindrical cavities with high Q has yielded unexpected results.

Zeit: Freitag, 02.03.2018, 10:15 Uhr

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