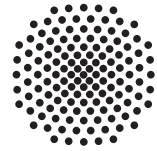


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# Stuttgarter Physikalisches Kolloquium

Max-Planck-Institut für Festkörperforschung  
Max-Planck-Institut für Intelligente Systeme  
Fachbereich Physik, Universität Stuttgart

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Login data will be announced by e-mail and on the colloquium webpage.

Dienstag, 3. November 2020

16.15 Uhr

Online-Vortrag

Stuttgarter Max-Planck-Institute, Heisenbergstraße 1, 70569 Stuttgart-Büsnau

## Quantum limited measurements of broadband electric fields in the terahertz

**Jérôme Faist**  
ETH Zürich



### Abstract

Ultrafast electro-optic sampling enables probing the properties of free propagating electric fields in the terahertz domain. We will discuss the spatial and temporal correlations measurement on vacuum fluctuations as well as the realization of photon-photon interfaces in silicon photonics with single photon coupling rates as high as 43MHz.