



PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik
der Johann Wolfgang Goethe-Universität Frankfurt

Mittwoch, den 06.06.2018, 16 Uhr c.t.
Großer Hörsaal, Raum _0.111,
Max-von-Laue-Str. 1



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" Terahertz Light Fingerprints Biomolecular Dynamics "

20 years ago Grischkowsky and coworkers began a revolution in the terahertz (THz) optical range. Zhang and others extended this new field so that measurements unimagined previously became accessible in table top systems. An immediate effort began to determine intramolecular dynamics of biomacromolecules such as RNA's and proteins. In this talk I will discuss how THz polarization and nonlinear techniques can be used to both fingerprint specific biomolecules and reveal their biologically important changes . I will also discuss ongoing challenges that need to address to fully realize THz light's impact on the biomedical community. This work was made possible by National Science Foundation MRI² grant DBI2959989, IDBR grant DBI1556359, and MCB grant MCB1616529, and the Department of Energy BES grant DE-SC0016317.

Die Dozenten der Physik

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