



TRR 80 Sonderseminar

Am Freitag, den 19. September um 10:30 Uhr

spricht

Prof. Dr. N. Peter Armitage

Johns Hopkins University, Baltimore

über das Thema

THz Investigations of Exotic Quantum States of Matter

The occurrence of exotic quantum phenomena that emerges on long length scales heightens the need for new experimental tools that probe finite, yet long time scales (compared to bare electronic ones). This talk will review recent advances in the area of THz spectroscopy and its application to exotic quantum states of matter. I will give examples of its use on material systems as diverse as high-temperature cuprate superconductors, 1D quantum spin chains, “heavy-fermion” magnets, and topological insulators. From the observations of quarks and meson-like bound states in spin-chains to Dirac strings and to nematic electronic liquid crystals, these systems are host to phenomena which are found repeated across the diverse length and time scales of physics. A desire to characterize materials in a novel fashion and answer specific scientific questions is driving the THz technology forward, while new technology is changing the kinds of questions we think to ask.

Gäste sind herzlich willkommen.

Der Vortrag findet im Seminarraum R-242 / Institut für Physik, Universität Augsburg statt.

Gastgeber: Prof. Dr. Joachim Deisenhofer
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