Landau level excitation using photoconductive THz antennas

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We describe our recent experiments in implementing photoconductive THz emission techniques inside a liquid helium dewar. We used a photonic crystal fiber to send an ultrashort laser pulse into the cavity. This pulse is pre-chirped so that it maintains its length after the fiber. The THz emission is used to excite a hall sample in the dewar. This experiment is in progress and we will describe preliminary results.

Biography

Mayer A Landau completed his MS in electrical engineering in 1999 at the University of Michigan and obtained his PhD in optics at the University of Rochester’s Institute of Optics in 2010. He has worked previously as a staff scientist at Los Alamos National Laboratory’s Meson Physics Facility and at MIT Lincoln Lab’s radar division. Currently, he works as a research physicist in the space directorate of the US Air Force Research Laboratory.

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