Seminar on Modern Optics and Spectroscopy

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THz-time domain spectroscopy of molecular vapors

October 12, 2004 12:00 – 1:00 p.m.

Abstract

The effectiveness of THz Time-Domain Spectroscopy (THz-TDS) will be demonstrated by measurements of rotational transitions in molecular vapors. A previously impossible far-infrared (THz-TDS) characterization of an active flame will be described and compared to far-infrared Fourier Transform Spectroscopy. Waveguide THz-TDS measurements of 20 nm water layers will be described and compared with submonolayer THz-TDS measurements of water, ammonia, and methyl halides.

Grier Room, MIT Bldg 34-401 Refreshments will be served