

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Graeme Milton

University of Utah

will speak on

Cloaking: where Science Fiction meets Science

ABSTRACT: Cloaking involves making an object partly or completely invisible to incoming waves such as sound waves, sea waves or seismic waves, but usually electromagnetic waves such as visible light, microwaves, infrared light, or radio waves. Camouflage and stealth technology achieve partial invisibility, but can one achieve true invisibility from such waves? This lecture will survey some of the wide variety of ideas on cloaking: these include transformation based cloaking, non Euclidean cloaking, cloaking due to anomalous resonance, cloaking by complementary media, active interior cloaking and active exterior cloaking. Beautiful mathematics is involved.

MONDAY, FEBRUARY 8

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3:40 PM

ROOM 617, WACHMAN HALL

DEPARTMENT OF MATHEMATICS