

MSRI



Berkeley
University of California



MSRI/Evans Talk

MONDAY, SEPTEMBER 27, 2010

4:10PM; 60 EVANS HALL

UNIVERSITY OF CALIFORNIA, BERKELEY

“CLOAKING: WHERE SCIENCE FICTION MEETS SCIENCE”

Graeme Milton
(University of Utah)

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 cloaking by plasmonic covers, 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.

Refreshments at a nearby establishment immediately following the talk!
Graduate students and Postdoctoral Fellows are particularly welcome.

<http://www.msri.org>