

The Math/Stats Colloquium Department of Mathematics and Statistics San José State University



Gunther Uhlmann Univ. of Washington (vis. MSRI)

Harry Potter's Cloak Via Transformation Optics NOVEMBER 20, 2019, MH320

Abstract: Can we make objects invisible? This has been a subject of human fascination for millennia in Greek mythology, movies, science fiction, etc., including the legend of Perseus versus Medusa and the more recent Star Trek and Harry Potter. In the last sixteen years or so there have been several scientific proposals to achieve invisibility. We will introduce in a non-technical fashion one of them, the so-called "transformation optics" that has received the most attention in the scientific literature.

Background: Multivariable calculus.

About the speaker: Gunther Uhlmann is the Walker Family Endowed Professor in Mathematics at U. Washington. His research interests are in inverse problems and imaging, partial differential equations, microlocal analysis, and scattering theory. He has received numerous awards and honors; in particular, he is a Fellow of both the American Mathematical Society and the American Academy of Arts and Sciences.

> SNACKS IN MH331B AT 2:30 PM TALK STARTS AT 3:00 PM

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