

COLLOQUIUM

Harry Potter's Cloak via Transformation Optics

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Invisibility has been a subject of human fascination for millenia, from the Greek legend of Perseus versus Medusa to the more recent *The Invisible Man*, *The Invisible Woman*, *Star Trek* and *Harry Potter*, among many others.

Over the years, there have been occasional scientific prescriptions for invisibility in various settings but the route to cloaking that has received the most attention has been transformation optics. To achieve invisibility one can design materials that would steer light around a hidden region, returning it to its original path on the far side. Not only would observers be unaware of the contents of the hidden region, they would not even be aware that something was being hidden.

In this talk I will explain the Mathematics behind transformation optics.

The lecture will take place in Thackeray 704 at 3:30pm.
Refreshments will start at 3:00pm.