Undergraduate colloquium

Dr. Andrew Thaler

Mathworks

Math is the new black

March 31, PGH646, 4:30pm

In this talk, we examine several applications of mathematics to signal processing and medical imaging. We will discuss how to compress, remove noise from, and add effects to audio signals, the basics behind the famous JPEG algorithm for image compression, and, if time permits, some of the ideas behind CT scans. The fundamental mathematical idea behind these applications is a change of basis (specifically, the Fourier transform and the Radon transform). I will conclude the talk with a brief account of my career path and provide some (hopefully) useful tips for finding a career in a mathematically-related field.

As usual pizza will be served

http://www.math.uh.edu/colloquium/undergraduate/