

# *Undergraduate Math and Physics Seminar*

## Climb the Highest Mountain: A Review of Numerical Optimizations Techniques

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**Abstract:**

Numerical optimization has been the tool enabling many technical achievements, especially in optics. Lens systems and optical interference coatings with hundreds of variables are now able to image objects from the infinitesimal to the infinite through microscopes and telescopes. Various optimization methods will be discussed—beginning with simple one-dimensional sampling.

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***When*** : Monday, January 30, 2017

4:30 p.m. – 5:20 p.m.

***Where*** : Del Norte 1530