

# SEMINAR IN PHYSICS

FRIDAY, April 25, 2014  
3:30-4:25 – Ross 0220  
Refreshments

## Particle Accelerators

Steven Rutherford (UNC Physics student)

Steven will be discussing particle accelerators and their use in physics experiments. Starting with an explanation of what particle accelerators are and how they work, this seminar will then cover more in-depth examples from major particle accelerators such as the Large Hadron Collider.

Topics will include the specific capabilities of famous particle accelerators, as well as experiments that have been completed and some that are currently in progress. The primary focus will be particle colliders and their use in studying particle physics.

## The Photoelastic Effect on Plastic

Benjamin Carlson (UNC Student)

A material is birefringent if a ray of light passing through it experiences two refractive indices. The effect of this is to change the polarization state of the transmitted light. The extent of the change depends on the material and the thickness of the specimen. Birefringence can be induced in some materials by the presence of an applied or residual stress.