

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP) Joint Experimental and Theory Seminar in Particle Physics and Cosmology:



## Corrinne Mills U Chicago Baryogenesis and BSM Higgs physics

The LHC has the potential to address many outstanding questions in physics, and one of the most fundamental is baryogenesis. The conditions for matter to outnumber antimatter in the moments after the Big Bang cannot be accounted for in the Standard Model, and yet we exist. The solution may lie in an extended scalar sector, motivating searches for Higgs bosons in addition to the one observed in 2012. I will discuss the models motivating these searches and existing experimental constraints, as well as next directions and the importance of the high-luminosity LHC.

## Friday, March 2, 2018 1:00pm 401 Physical Sciences Bldg.