

TO THE TERASCALE AND
BEYOND: NEW PHYSICS,
ELECTROWEAK SYMMETRY
BREAKING, AND THE LHC

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Tuesday, April 3, 2012

4:00 P.M. ❖ 118 NSH

(Refreshments at 3:30 P.M. NSH 202)

The Large Hadron Collider (LHC) is poised to answer many long-standing questions in particle physics. I will briefly review the foremost of these, electroweak symmetry breaking, and its connection to the origin of mass in the Standard Model of particle physics. The structure of the Standard Model guarantees that the LHC will see some form of new physics. The high scales probed by collisions at the LHC offer unprecedented possibilities for discovery, but also require new strategies for analysis, particularly when massive Standard Model particles are produced at high energies. I will detail a few such strategies and talk about what we will be able to learn from the LHC over the next few years.

Colloquium

All interested persons are cordially invited to attend.