

Tuesday

September 9

4 P.M.

Rm 415 NSH

Higgs Boson Properties, Couplings, and Tensor Structure in the Four-Lepton Golden Channel

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The discovery of the Higgs boson brings with it a new era in elementary particle physics. Besides being the key to the mechanism of electroweak symmetry breaking and to the generation of fermion masses, the observation of the Higgs boson represents the first time in the history of particle physics that an elementary spin-0 particle has been seen. I will discuss measurements of various properties of this unique particle including recent measurements and constraints of the tensor structure and anomalous couplings of the Higgs boson in the four-lepton channel, as well as future prospects for precision measurements at the LHC.