Isobel Ojalvo
Princeton University

March 1, 2018
Thursday

3:30 - 4:30 PM
Refreshments at 3:00 PM

PRB 595
3 Cummington Mall

This past year with data collected from the Large Hadron Collider (LHC) using the Compact Muon Solenoid experiment, the first observation of the SM higgs in its decay to tau leptons with a single experiment was announced. Due to its very short lifetime, the tau lepton is only able to be detected via its decay to lighter leptons and mesons and, especially notable at a hadron collider, its signature can very easily be mimicked by a quark or gluon jet. We discuss this exciting result along with recent advances in tau trigger, reconstruction and identification which made this result possible. We will also discuss prospects for future measurements and searches at the LHC and beyond.