Title:
Supersymmetry Searches with the CMS Experiment

Abstract:
The Higgs boson discovery by the CMS and ATLAS Collaborations at CERN was a major milestone for particle physics and marked another success of the Standard Model. However, there are good reasons to believe that the Standard Model is incomplete and only an effective approximation of a more complete theory that would supersede the Standard Model at a higher energy scale. Supersymmetry is an attractive extension of the Standard Model that can explain several shortcomings of the Standard Model. In this talk, I will talk about two thrusts of my group’s efforts to search for signs of Supersymmetry with the CMS experiment: (1) inclusive search for Supersymmetry in the all-hadronic final state, and (2) dedicated search for Supersymmetric top quarks using a novel top quark tagging technique.