

University of Texas at Dallas Physics Colloquium

Wednesday, February 1, 2011 SLC 1.102
Coffee and Cookies: 3:45 PM Talk: 4:15 PM

Searching for New Physics at the Large Hadron Collider



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The Large Hadron Collider (LHC) has successfully delivered a large amount of data in the year 2011. ATLAS is one of the four major experiments designed to use these data to search for new physics phenomena like the Higgs Boson, Supersymmetry and microscopic Black Holes.

In my talk the recent findings of the ATLAS experiment on the new physics searches will be discussed. While the world is excited by the tantalizing hints of the Higgs boson at the LHC, searches for evidence of physics beyond the Standard Model continue. One such search and one of the primary physics goals of the LHC is the search for Supersymmetry, a theory that predicts symmetry between matter and forces. It predicts a promising dark matter candidate, joining the physics of the very big to that of the very small. It provides a framework that unifies the fundamental forces. We will discuss the recent results of Supersymmetry searches at the LHC, its implications and its future prospects.