

TUFTS UNIVERSITY
Physics and Astronomy Colloquium

**“Searching for the Higgs
Boson with the ATLAS
Experience”**

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All the particles of the Standard Model (SM) of particle physics have been observed except for the Higgs boson. This particle is responsible for giving masses to all other massive particles. The central role played by the Higgs boson in the SM explains why the search for this particle is one of the main goals of the LHC physics program. After a discussion of the mechanism that gives mass to particles, I will describe the latest Higgs search results using the ATLAS experiment at CERN. I will also discuss the prospects for finding (or ruling out) the Higgs boson in 2012.

3:00 pm

Friday, April 20, 2012

Robinson 253

Medford Campus

Refreshments served at 2:30 in The Knipp Library, Room 251