



High Energy Physics Lunch Seminar

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“Searches for a Minimal SUSY B – L Model with the ATLAS experiment”

Host: Walter Hopkins

October 22, 2019 – 12:00 p.m.-1:00p.m. Building 362/F-108

Abstract:

Supersymmetry provides elegant solutions to many of the outstanding issues with the Standard Model, but requires care in suppressing processes that may lead to lepton & baryon number, or R-parity, violation.

The extension of a discrete subgroup of gauged baryon minus lepton number (B-L) can naturally explain the existence of R-parity while providing a connection to the neutrino sector.

I will present searches at the ATLAS experiment for new particles whose unique signatures & event combinatorics give us a chance to observe these rare processes, and I will discuss the detector improvements necessary to bring these searches to the high-luminosity LHC.

HEP Lunch seminar info:

Please use the doodle poll to sign-up for lunch at

<https://doodle.com/poll/4npmmtapa2uympt>

Chicken Sandwich \$8, Sub Sandwich \$9, Salad \$7, Slice of Pizza- \$5 (all include coffee). Coffee 25¢. Pop or Water 75¢.

The HEP Lunch Seminar Schedule can be viewed at:

<https://indico.fnal.gov/event/22122/>