

# Physics Colloquium

## “Searching for Dark Matter with the LUX and LZ detectors at the Sanford Underground Research Facility”

Professor Robert C. Webb

Texas A&M University

2:00, Friday, November 21

Farrington 105

The Large Underground Xenon (LUX) experiment, a dual phase xenon time projection chamber, has been operated underground at the Sanford Underground Research Facility since February 2013 and the next generation dark matter detector based on this same technology (LZ) is in the planning stages. I will review the case for dark matter and report on the first WIMP search dataset from LUX, taken during the period from April to August 2013. I will then go on to outline the near and long term prospects for the discovery of dark matter in the coming decade.

