

# Physics Department Colloquium

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## Title: Neutrinos, Nuclear Reactors and the Origin of Matter

Abstract: The neutrino started out as a postulated subatomic particle, and the world waited until nearly thirty years later, in 1956, for it to be discovered. More recently, interest in neutrino physics surged over the past twenty years, as it became clear that it had a richness that may very well explain the origin of matter in the universe. Nuclear reactors as neutrino sources have always played a key role in these experiments. We will review that role, with a focus on the recent Daya Bay Reactor Neutrino Experiment, at a nuclear power plant in Guangdong, China, and the upcoming measurement called PROSPECT at the Oak Ridge National Laboratory.

**Date:** Tuesday, March 3, 2015

**Time:** 12:30 PM

**Where:** Science Complex, P-117

