# International Workshop for the Next Generation Nucleon Decay and Neutrino Detector (NNN15) and Unification Day 2 (UD2)



Wednesday, 28 October 2015 - Saturday, 31 October 2015 Stony Brook University

# **Scientific Programme**

#### Overview

The NNN series of workshops have been providing the international community a forum for in-depth discussions on large-scale NNN detectors since its inaugural workshop in 1999 at Stony Brook. This year the workshop returns to Stony Brook after 16 years.

**Topics** 

The main physics topics of Workshop include: Discovery of proton decay, discovery of CP violation in the lepton sector, determination of the neutrino mass hierarchy and observation of neutrinos from core collapse supernovae.

**Format** 

Following the successful format of previous NNN workshops, NNN15 will have invited plenary talks as well as a small number of contributed talks. In addition to the plenary sessions, there will be a poster session as well as parallel sessions addressing detector R&D, NNN physics, unification theory, and beams for NNN detectors.

Unification Day Sub-workshop

The "Unification Day 1" workshop was held at Keystone, Colorado in 2004. The workshop was organized under the theme to bring together a group of theorists to discuss roles of proton decays and CP violation in the lepton sector in various 'unification' theories and leptogenesis models, and discuss the details on our updated understanding on MGUT.

Unification Day 2 will preserve the spirit of the Unification Day 1. In particular it would emphasize the updated views at the interface of grand unification, string theory and extra dimensions, which have evolved over the last decade both due to progress in our theoretical understanding and due to experimental discoveries of the Higgs boson,  $\theta13$  and ve appearance as well as searches for supersymmetry at the LHC.

Presentations

To access the presentations navigate from the timetable or contribution list links found in the sidebar.

### **Unification Day 2**

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