

# **Microwave Kinetic Inductance Detectors and Cosmology: Scientific Motivation, Recent Achievements and Planned Experiments**

**Monday, 26 August 2013 - Tuesday, 27 August 2013**

**Fermilab**

## **Scientific Programme**

The workshop structure is such that we will have plenty of time for discussion. We are also planning a visit to our lab facility on site, at SiDet, for those interested in the hardware effort.

### **Questions and Themes:**

-What would be the contributions to cosmology of an instrument capable of giving photometric information with an R of 80-100 (or an error in distance of about 10-15 Mpc) for 50% of all the galaxies in the LSST field in the magnitude range between 22 and 24.5 (or perhaps 25)?

- Status updates from various groups who have been working on MKIDs development

- Science topics/concepts for possible MKID-based instruments

- Existing data sets and recent observing campaigns: lessons learned

- Simulations: what are the goals?

- Papers that are slated to come out or studies in progress.

- What are the primary science arguments that we should make, and how will we test/prove them?

- The path forward: MKIDs collaborative and joint efforts