

## **NSLS I : Challenges and upgrades on a 30 year old high power RF systems**

*Tuesday 8 May 2012 10:00 (30 minutes)*

The National Synchrotron Light Source consists of an x-ray ring operating with 300mA stored beam at 2.8 GeV and a UV ring with 1 ampere of stored beam at 800 MeV and a shared injector linac and booster. It has been in operation since 1979. The RF systems at this facility cover a wide variety of RF technologies from high power tetrode tube based systems to moderate power solid state devices. Over the 33 years of operation the system has seen some upgrades but the amplification and control chain has remained relatively static. This presentation describes some of the upgrades and challenges that are faced in trying to maintain and extract maximum reliability and performance out of these systems. The challenges are unique mainly because of the age of the systems involved and the fast changes the RF industry has seen in the recent years with the advent of solid state devices and decline in the tube based device market.

**Author:** GOEL, Aditya (B)

**Presenter:** GOEL, Aditya (B)

**Session Classification:** Session 1