

## ***Dr. Chris Carilli***

---

*NRAO Chief Scientist; Assistant Director for the Office of Science and Academic Affairs*

*National Radio Astronomy Observatory (NRAO)*



***Friday, October 10, 2014***

***BB 3.04.18***

***3:00 PM***

### **Cosmic Reionization**

The cosmic reionization corresponds, and the preceding 'dark ages', corresponds to the epoch when light from the first galaxies reionized the neutral intergalactic medium (IGM) that pervaded the Universe following recombination. This epoch is the last frontier in the study of cosmic evolution, corresponding to the formation of the first galaxies and black holes. I will discuss our current understanding of cosmic reionization and the evolution of the neutral IGM. I will then discuss experiments being performed to detect the 21cm line from neutral hydrogen from the IGM during reionization. These experiments have the potential to reveal the 'richest of all cosmological data sets', following the full three dimensional evolution of large scale structure in the Universe within 1 Gyr of the Big Bang.



#### **Department Contact Information**

Dr. Chris Packham [Chris.packham@utsa.edu](mailto:Chris.packham@utsa.edu)

Christella Robledo [Christella.Robledo@utsa.edu](mailto:Christella.Robledo@utsa.edu)

<http://physics.utsa.edu>