

INVITED TALK

The Oldest Light in the Universe

Dr. Lyman A. Page¹
Princeton University

DATE:

Thursday, November 6, 2003

TIME:

4:30 PM

LOCATION:

Room 375
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230

Abstract

The cosmic microwave background (CMB) is the remnant radiation from the big bang that has cooled with the expansion of the universe to 2.7 K. One may think of the CMB as coming to us from a surface at the edge of the observable universe. The absolute temperature of the radiation varies from spot to spot on this surface by roughly by a part in 100,000. Encoded in these tiny spatial variations, called the anisotropy, are the values of the parameters that describe the contents and evolution of the universe. Additionally, an image of the surface literally gives us a picture of the infant universe with the temperature variations corresponding to seeds that gave rise to all the galaxies and clusters of galaxies that we observe today.

¹http://pupgg.princeton.edu/www/jh/research/Page_Lyman.htmlx