

# Cosmology Seminar

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**Title:** A 30/30 vision of Galaxy formation and Reionization.

**Abstract:** While galaxy formation is a continuous process, there is an urge to determine the moment in time where the 'dark ages' ended. This is done by determining the epoch of re-ionization, when hydrogen in the inter-galactic medium was ionized.

This implies that enough star-formation had happened to produce several ultraviolet photons for each hydrogen atom. Whether this phase transition was quick or slow, and patchy or simultaneous across large swaths of space, will tell us a lot about galaxy and star formation in the first billion years. Observational studies of the earliest galaxies as initiators and probes of re-ionization have had many recent successes, but we lack (1) good, statistical samples and (2) knowledge of the physical nature of these galaxies.

**Thursday January 17, 2008**  
**12:10 PM - Room 416 PHY/GEO**