

Abstract Submitted
for the TSF14 Meeting of
The American Physical Society

Probing the First Billion Years of Universe V. TILVI, C. PAPOVICH, Texas A&M University, S.L. FINKELSTEIN, University of Texas, J. LONG, Texas A&M University, M. SONG, University of Texas, M. DICKINSON, NOAO, H. FERGUSON, A. KOEKEMOER, STScI, M. GIAVALISCO, University of Massachusetts, B. MOBASHER, UC Riverside — Most of the major events in the history of the universe occurred during the first billion years. However, this era also remains one of the least explored epoch. Specifically, our knowledge about when and how did the first stars and first galaxies form and how did the entire universe transition from a neutral to an ionized phase, called the epoch of reionization, remains limited. To probe this epoch of reionization, we have recently obtained extremely deep spectroscopic observations of galaxies within the first 800 Myrs after the Bigbang. Our results suggest that universe is significantly neutral by redshift of about 8 (nearly 650 Myrs after the Bigbang) and this transition occurs over a very short time interval of about 300 Myrs.

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Date submitted: 30 Sep 2014

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