
Sources to Power Cosmic Reionization: Contribution of Galaxies and QSOs to the Ionizing Emissivity at $z > 6$

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Abstract

One important continuing question in extragalactic cosmology regards the reionization of the neutral hydrogen in the universe. What were the sources that drove cosmic reionization and over which time scale did it occur? Over the last few years, we have increasingly good constraints on the contribution of both galaxies and quasars to cosmic reionization, as a result of deep lensing probes and wide-area blank field probes for these sources. Simultaneously, significantly improved constraints have been obtained on the escape fraction, the Lyman-continuum production efficiency, and also the prevalence of faint quasars. In providing a review on cosmic reionization, I focus in particular at how the ionizing emissivity from different sources compare with what we can infer for the Universe as a whole.

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