

Abstract Submitted
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Effects of Observational Systematics on redshift measurements for the Dark Energy Spectroscopic Instrument RYAN STATEN, Southern Methodist University, DESI COLLABORATION — The Dark Energy Spectroscopic Instrument (DESI) is a redshift survey looking to probe the large scale structure of the universe and its expansion history. To do so, DESI will observe more than 30 million galaxies out to 11 billion light years away over a five year period. In particular, emission line galaxies (ELGs) that span a redshift range of 0.6 to 1.6 constitute a large portion of these galaxies to be observed. This analysis looks at the effects of observational systematics such as seeing, airmass, and transparency on the redshift measurement efficiency of ELGs and how this affects DESI's ability to accurately measure baryon acoustic oscillations that act as a standard cosmological ruler.

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