



Contribution ID: 284

Type: **Oral**

## Cosmology with the Lyman-alpha Forest

*Monday 7 August 2017 17:00 (15 minutes)*

The Lyman-alpha forest provides a powerful probe of cosmic structure at  $z = 2-4$ , with physics that is relatively straightforward. I will discuss current constraints on dark energy from baryon acoustic oscillation measurements in the 3-d Lya forest and on neutrino masses from the 1-d Lya forest power spectrum, with measurements coming from the Baryon Oscillation Spectroscopic Survey (BOSS). I will discuss prospects and challenges ahead, with emphasis on accurate modeling and anticipated measurements from DESI.

**Primary author:** Prof. WEINBERG, David (Ohio State University)

**Presenter:** Prof. WEINBERG, David (Ohio State University)

**Session Classification:** Cosmology

**Track Classification:** Cosmology (incl. neutrino mass/number density)