Contribution ID: **12** Type: **not specified**

LSS and BAO: current status and prospects

Friday, 18 April 2014 11:00 (45 minutes)

The Baryon Acoustic Oscillation (BAO) standard ruler has risen in prominence over the last decade, reaching a 1% distance measure at z = 0.57 with the latest release from the SDSS-III BOSS survey and providing the first detection of the BAO in the Lyman-alpha forest. The same large scale structure (LSS) surveys allow constraints on the growth rate of cosmic structure through redshift space distortions. I will review the current status of both measurements and their cosmological implications. Upcoming spectroscopic surveys like Euclid and DESI will vastly expand the redshift coverage and precision. They should have sufficient sensitivity to detect massive neutrinos even at the minimal mass allowed by oscillation experiments.

Primary author: Dr REID, Beth (UC Berkeley)

Presenter: Dr REID, Beth (UC Berkeley)

Session Classification: 3-Observational Cosmology