Contribution ID: **261** Type: **Oral**

Cosmology with the HETDEX survey

Monday 7 August 2017 16:00 (30 minutes)

HETDEX (Hobby-Eberly Telescope Dark Energy eXperiment) is a galaxy survey targeting Lyman-alpha emitters (LAEs) at high redshifts (1.9<z<3.5). Starting from late 2017, the survey will observe about a million LAEs over ˜400 sq. degrees, which corresponds to ˜10Gpcˆ3 in volume. The main science goal of HETDEX is to measure the angular diameter distance and the Hubble expansion rate at high redshifts (z˜2.5 and z˜3) within a percent accuracy, so that we can measure the dark energy density better than 3-sigma. In this talk, I will introduce the HETDEX survey, summarize the survey design, observing strategy, as well as some result from the commissioning data.

Primary author: Dr JEONG, Donghui (The Pennsylvania State University)

Presenter: Dr JEONG, Donghui (The Pennsylvania State University)

Session Classification: Cosmology

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