



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 $\sim 10 \text{ Gpc}^3$ in volume. The main science goal of HETDEX is to measure the angular diameter distance and the Hubble expansion rate at high redshifts ($z \sim 2.5$ and $z \sim 3$) 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.

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)