



Contribution ID: 324

Type: **Talk**

## Weak lensing mass map in DECaLS DR1 survey

*Tuesday 8 December 2015 15:03 (21 minutes)*

We present the largest weak lensing mass map covering  $\sim 3000$  square degrees of the DECaLS DR1 Survey. A good agreement can be found between optical and dark matter maps. Comparing with the mass maps from CFHT Stripe 82 Survey (CS82), the similar high signal-to-noise ratio peaks can be found, which means the systematics of the maps are well controlled. We found  $\sim 50,000$  WL peaks with SNR higher than 3.0. We also study the cross-correlation between WL peaks and massive clusters and galaxies.

**Author:** Dr SHAN, Huanyuan (EPFL)

**Presenter:** Dr SHAN, Huanyuan (EPFL)

**Session Classification:** 12 - Gravitational lensing