## **Elbereth conference 2020**



ID de Contribution: 31

Type: Oral presentation

## Characterizing Galaxy Protoclusters: a case study of a Planck-selected candidate

mercredi 26 février 2020 15:15 (15 minutes)

Understanding how and when galactic structures formed is a major unsolved problem in Astrophysics, yet such sources are also very red and faint, making their confirmation a challenge. Nascent galaxy overdense regions or "protoclusters" are relatively brighter at z=2-4, during which the in-situ star formation rates and/or AGN activities peaked. While obtaining spectroscopic confirmation of multiple member galaxies can be slow-going, at the same time there is ample useful photometric information. We present a study of the protocluster candidate PLCK G256.8-33.2, which is drawn from the Spitzer Planck Herschel Infrared Cluster (SPHerIC) survey. SPHerIC identified 82 galaxy protocluster candidates at z=1.3-3.0 using mid- through far-infrared imaging data. In this preliminary analysis we include also optical and near-infrared imaging to do the matched photometry and fit Spectral Energy Distribution (SEDs) to the galaxies in to measure their photometric redshifts.

## Field

Cosmology

Auteur principal: PERDEREAU, Thibaut Orateur: PERDEREAU, Thibaut Classification de Session: Talk

Classification de thématique: Astrophysics