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Kinematics and star formation histories of brightest cluster galaxies

BEAMS is a spectroscopic survey of brightest cluster galaxies (BCGs) in massive clusters detected by the Advanced Atacama Cosmology Telescope (AdvACT). The goal is to trace the evolution of AGN feedback (both radio and quasar mode), stellar populations, and the growth of central galaxies in clusters over a 3.4 Gyr time period ($0.3 < z < 0.8$). Our study is focused on analyzing the new spectroscopic data of the BEAMS BCGs observed on the Southern African Large Telescope (SALT). In particular, we extract the spectra and stack them to increase the signal-to-noise ratios to get more accurate measurements. The stellar populations and star formation histories of BCGs can then be measured as a function of cluster mass and redshift. We will present our results on the kinematic properties and star formation histories measured from the stacked BCG spectra.different objects from the longslit
spectra, and the goal is to stack the spectra to increase the signal-to-noise ratios to get more accurate measurements.The stellar populations and star formation histories of BCGs can then be measured as a function of cluster mass and redshift. We will also directly fit the stacked spectra with stellar population models in order to constrain their star formation histories.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

MSc

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