

GLACE: a window on the evolution of galaxies within clusters. Revealing galaxy evolution within Zw Cl0024.0+1652

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Abstract

Using data from the Gran Telescopio de Canarias (GTC), the GaLaxy Cluster Evolution (GLACE; Sánchez-Portal et al. 2015) survey investigates emission line galaxies (ELGs) and active galactic nuclei (AGN) hosts across various redshifts. Recent observations within the ZwCl 0024.0+1652 cluster, situated at an intermediate redshift of $z \sim 0.4$, reveal intriguing patterns of star formation suppression among ELGs. Our analysis, incorporating multi-wavelength data and which is still a work in progress, indicates a significant increase in the fraction of galaxies with suppressed star formation within ZwCl 0024.0+1652. This finding underscores the interplay between galactic processes and environmental factors within dense cluster environments. In this poster, we explore the characteristics of cluster environments and their influence on the evolutionary pathways of galaxies, focusing on the particular case of ZwCl 0024.0+1652.

My poster in zenodo.org can be found here