2025 天文年會 (ASROC Annual Meeting)



Contribution ID: 124 Type: Poster

Probing Galaxy Quenching in the Early Universe through Color Gradients of Quiescent Galaxies at z > 3

Previous studies have investigated the quenching mechanisms of quiescent galaxies at high redshift. However, due to limitations in angular resolution and sample size, the underlying processes remain poorly understood. In this study, as an initial step, we aim to explore the quenching process by analyzing the spatially resolved color profiles of quiescent galaxies at z>3 using data from JWST. We will derive color gradients based on available JWST/NIRCam filters to identify radial variations within individual galaxies. By comparing these profiles across a sample of quiescent galaxies, we seek to identify the physical mechanisms responsible for the cessation of star formation in the early universe.

Section

Galaxy/Extragalactic

Primary author: TSAI, Ming Jhe (National Taiwan university)

Presenter: TSAI, Ming Jhe (National Taiwan university)

Session Classification: Poster-EA