

Contribution ID: 11

Type: **Oral**

# Probing the Circumgalactic Medium of Green Valley Galaxies

*Saturday, May 17, 2025 3:00 PM (15 minutes)*

How galaxies transition from star-forming to passive remains an open question. To shed light on this process, one can study the properties of the circumgalactic medium (CGM)—the site of gas inflow and outflow—around galaxies in transition, known as green valley galaxies. By doing so, we can better understand how gas flow processes drive galaxy transformation. In this talk, I will present our investigation of the CGM properties of green valley galaxies by combining Hubble COS UV spectroscopic data with the galaxy catalog from the Dark Energy Spectroscopic Instrument (DESI). This large dataset allows us to measure the kinematic properties, spatial distribution, and column density of multiphase gas surrounding green valley galaxies. Finally, I will compare these CGM properties with those of star-forming and passive galaxies and discuss the implications of our findings for the physical mechanisms that quench star formation.

## Section

Galaxy/Extragalactic

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**Session Classification:** Galaxies