

2D characterization of the optical emission from ionized gas in clusters from the CATARSIS catalog

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In the paper (in preparation) presented here, we characterize the origin of the optical emission from the ionized gas in the cluster Abell 2390, which is included in the CATARSIS galaxy cluster catalog (the Calar Alto “Tetra-ARmed Super-Ifu spectrograph” Survey). We carried out this analysis using 2D spectroscopy with the MUSE instrument on the Very Large Telescope (VLT), together with data from the NirCam camera on the James Webb Space Telescope (JWST). We find that the brightest central galaxy (BCG) of the cluster hosts an active galactic nucleus (AGN) with LINER-type emission. Furthermore, there is evidence of interaction with a nearby galaxy, as indicated by the gas kinematics and the properties of the measured stellar populations.

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