

The Blue Compact dwarf galaxy UM 462 as laboratory to learn about stellar feedback in primeval galaxies

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Stellar feedback in high-redshift galaxies plays an important, if not dominant, role in the re-ionization epoch of the Universe. Because of their extreme star formation, very nearby Blue Compact Dwarf galaxies (BCDs) postulate as favorite local analogs where to carry out detailed studies to anchor our investigations on high-redshift galaxies. In this contribution, we will discuss recent results on a detailed study of an extreme BCD, UM 462, based on high quality optical integral field spectroscopy data obtained with MUSE. The galaxy has emission line ratios and equivalent widths, stellar mass, and metallicity similar to the targets now regularly observed at $z > 7$ by JWST, thus ideally suited as corner stone and reference galaxy. We will jointly discuss the ionised gas and the stars. We will present results on the 2D distribution of the physical and chemical properties, as well as the kinematics and ionisations mechanism of the ionised gas. Besides, we will present an overview of the stellar populations in the system, including the presence of Wolf-Rayet stars and supernova remnants.

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