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Chemodynamics of metal-poor starburst dwarf galaxies

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Nearby metal-poor starburst dwarf galaxies present a unique opportunity to probe the physics of high-density star formation with a detail and sensitivity unmatched by any observation of the high-z Universe. These chemically unevolved galaxies also offer insight into the synthesis, dispersal, and ejection of metals in galaxies, from the inflows of minimally processed material to the metal-enriched outflows driven by intense star formation events. Here we present the first results from a chemodynamical study of the nearby starbusting dwarf CGCG-007. We combine HST/WFC3 imaging together with VLT/MUSE integral field spectroscopy and Magellan/MIKE echelle spectra to map the distribution of metals and uncover multiple kinematic components. We show that MAVIS, by enabling parsec-level IFU observations of nearby super-star clusters will revolutionise our understanding of the feedback duty cycle in starburst galaxies.

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