

HI kinematics and star formation –the case of a dwarf galaxy

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Dwarf galaxies have low gravitational potential, low metallicity and are vulnerable to effects like shockwaves from supernovae. Star formation is expected to be inefficient in these systems, but that is not the case. I present my kinematical analysis of DDO 43, an isolated irregular dwarf in the Local Universe. I used VLA archival data of the HI content of DDO 43 to describe the local motions in around 150 positions over the galaxy, and to derive the global rotation as well. My presentation will cover the spectra analysis of DDO 43, and a comparative study of HI line properties and UV and IR imaging data. This allowed testing the relation of star formation to diffuse gas kinematics.

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