

CO and [CI] in Nearby Galaxies

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Abstract. Observations of CO can provide constraints on the density and temperature of the dense star-forming gas in galaxies, while observations of [CI] trace photon-dominated regions and provide information on the amount of atomic carbon in molecular clouds. I will review CO and [CI] observations of nearby galaxies, with an emphasis on galaxies for which observations of multiple transitions and isotopologues are available. I will also briefly discuss upper limits on water emission from nearby starburst galaxies and on O₂ emission in the SMC obtained with the Odin satellite.

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