

Invited talk

Dwarf galaxies in the Local Volume

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A catalog of 1060 Local volume (=LV) galaxies situated within a distance of 11 Mpc contains 870 dwarfs, i.e. 5/6 of the sample. Almost 40% of them have accurate distances measured with Hubble Space Telescope. Most of the LV dwarfs have been observed already in HI and H α emission lines, as well in far-ultraviolet with GALEX. We present basic properties of the LV dwarfs, their HI-mass content and star formation rate in different local environments. We discuss a baryonic Tully-Fisher relation for the LV dwarfs, and apply it to determine TF-distances for several hundreds other local galaxies. The accurate distances and radial velocities of the LV dwarfs are used to estimate dark matter masses around the nearby luminous galaxies. We discuss also does the Local Group may be treated as a typical or uncommon representative of the LV population.