

# Dark Matter In The Central Region of The Late-Type Galaxies

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Dark matter is a kind of matter that has mass, so it exerts a gravitational pull. It is invisible mass because it doesn't interact with electromagnetic radiation. So, dark matter is one of biggest mysteries in astrophysics. We studied the central mass distribution of galaxies by using CO observations of the Atacama Large Millimeter and sub-millimeter Array (ALMA). We found that there is a huge amount of invisible mass in the central region of galaxies. The alternative of dark matter (i.e. Modified Newtonian Dynamics (MOND)) is scientific theory proposed by Moti Milgrom as a solution to the missing mass problem in extragalactic astronomy. In this work, we used MOND paradigm to investigate about dark matter in the central region of galaxies. We found a strong acceleration in the central radius of galaxies, and revealed that the MOND theory could not intercept the unseen matter problem in galaxies.