

Abstract Submitted
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A Newtonian Solution to the Missing Matter Problem GARY HUNTER, ALAN MARTINEZ, JAMES ESPINOSA, University of West Georgia — Over fifty years ago, Fritz Zwicky made the discovery that galaxies contain insufficient matter to explain their flat velocity curves. The standard solution to this problem has been the introduction of dark matter. For over thirty years, scientists have searched for this missing matter under many different forms such as MACHOs and WIMPs. Twenty years ago, Milgrom modified Newton's second law to account for these flat velocity curves and more recently, Cooperstock and Tieu have applied General Relativity to galactic rotation and produced flat rotation curves. We have developed a modified Newtonian Law of Gravity, which has accounted for the results of the three classic tests of General Relativity, and have applied it to galactic rotation. Our results agree with observations and eliminate the need for dark matter.

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