

Abstract Submitted  
for the APR07 Meeting of  
The American Physical Society

**Galactic mass distribution without dark matter or modified Newtonian mechanics** KENNETH NICHOLSON, retired engineer, Caltech alumni — Given the dimensions (including thickness) of a galaxy, and its rotation profile, a method is arranged to find the mass and density distribution in the defined envelope that will cause that rotation profile with near-exact speed matches. Newton's law is unchanged. Surface-light intensity and dark matter are not needed. Results are presented in dimensionless plots allowing easy comparisons of galaxies.

Kenneth Nicholson  
retired engineer, Caltech alumni

Date submitted: 17 Dec 2006

Electronic form version 1.4