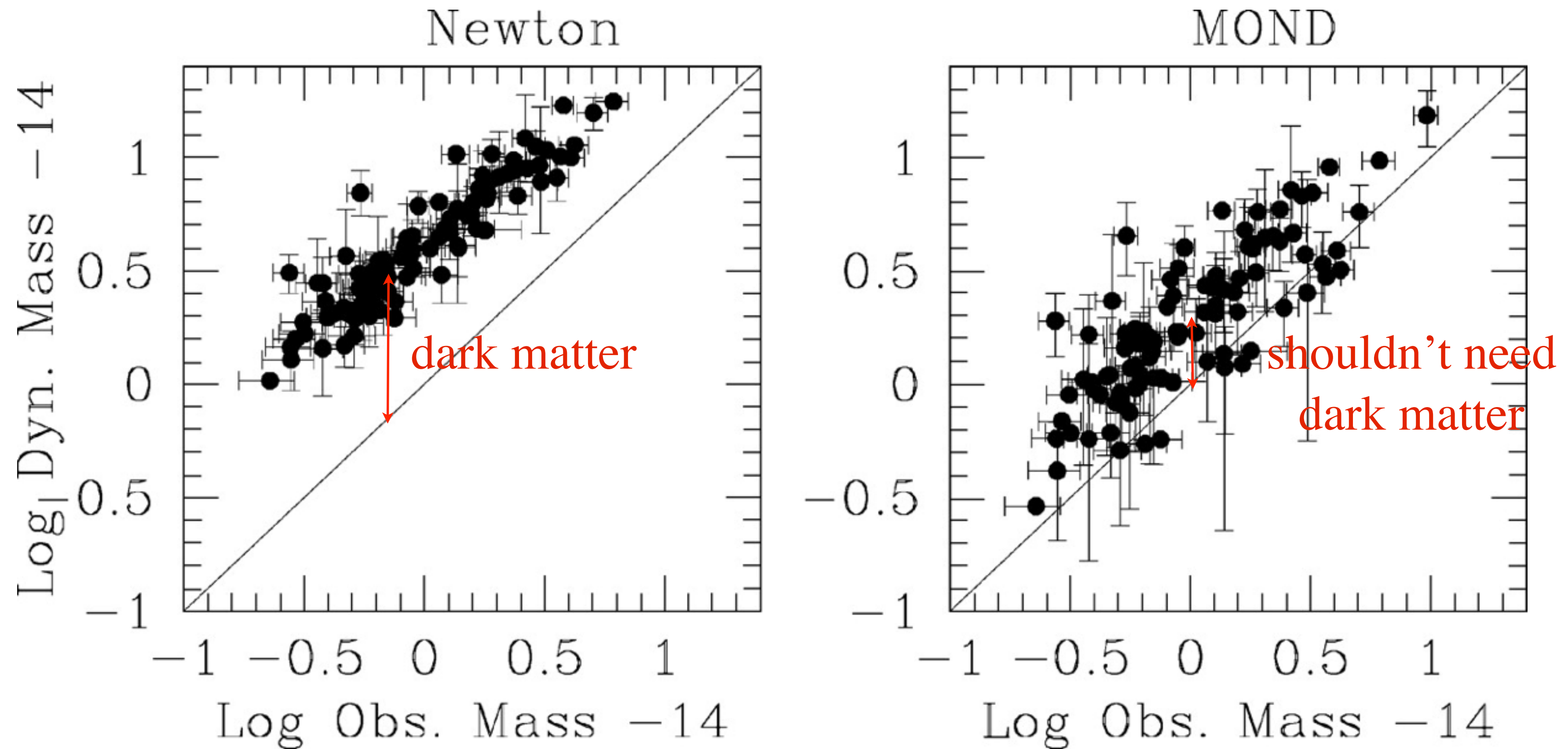


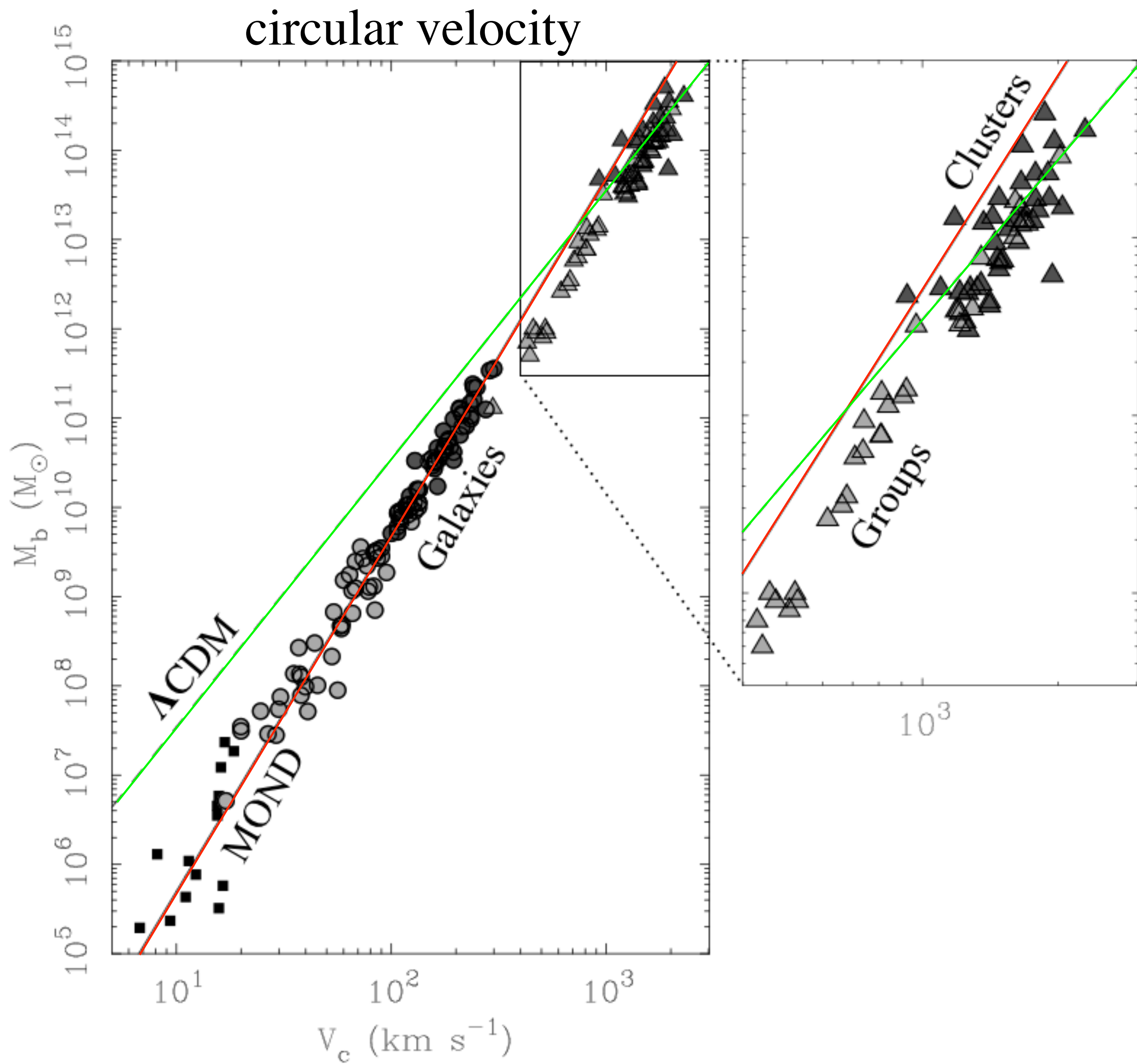
Clusters of galaxies

a persistent problem for MOND

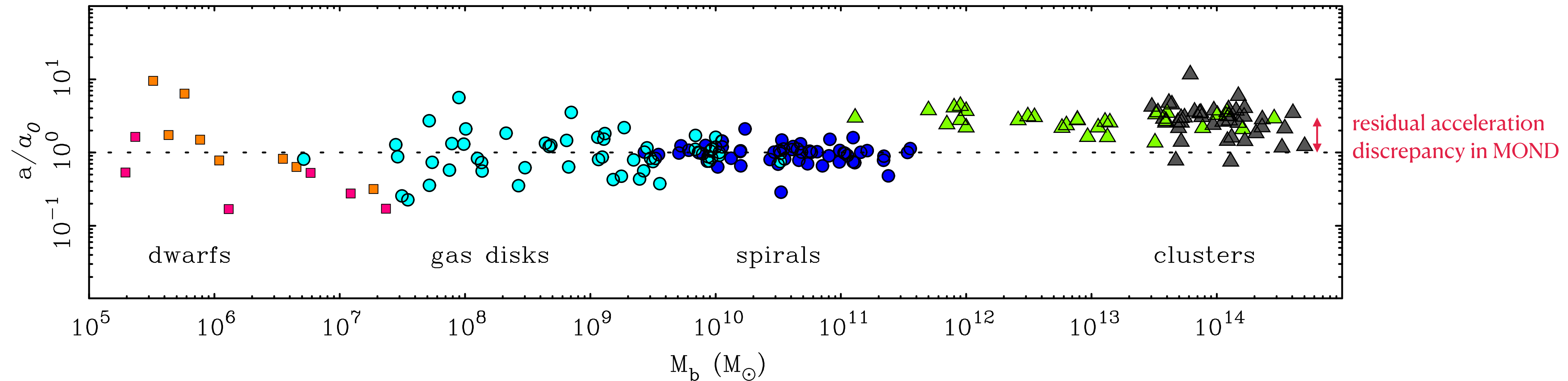


(Sanders & McGaugh 2002)

baryonic mass



Data for groups & cluster offset from MOND prediction,
but slope pretty good over many decades in baryonic mass.



$$a_0 = 1.2 \times 10^{-10} \text{ m s}^{-2} \approx \frac{cH_0}{2\pi} \approx c\Lambda^{1/2}$$

$$\Sigma_{\dagger} = 860 M_\odot \text{ pc}^{-2}$$

The object-by-object missing baryon problem

