

## Newtonian regime

$$g_{in} > a_0$$

$$M = \frac{RV^2}{G}$$

e.g.,  
surface  
of the  
Earth

isolated systems

## MOND regime

$$g_{in} < a_0$$

$$M = \frac{V^4}{a_0 G}$$

e.g.,  
remote  
dwarf  
Leo I



External Field dominant  
Newtonian regime

non-isolated systems

$$g_{in} < a_0 < g_{ex}$$

$$M = \frac{RV^2}{G}$$

e.g.,  
Globular  
cluster  
M13

External Field dominant  
quasi-Newtonian regime

$$g_{in} < g_{ex} < a_0$$

$$M = \frac{g_{ex}}{a_0} \frac{RV^2}{G}$$

e.g.,  
nearby  
Sgr  
dwarf

