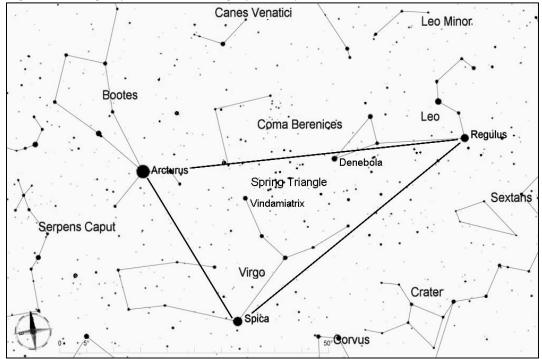
## Messier 49, Galaxy in Virgo

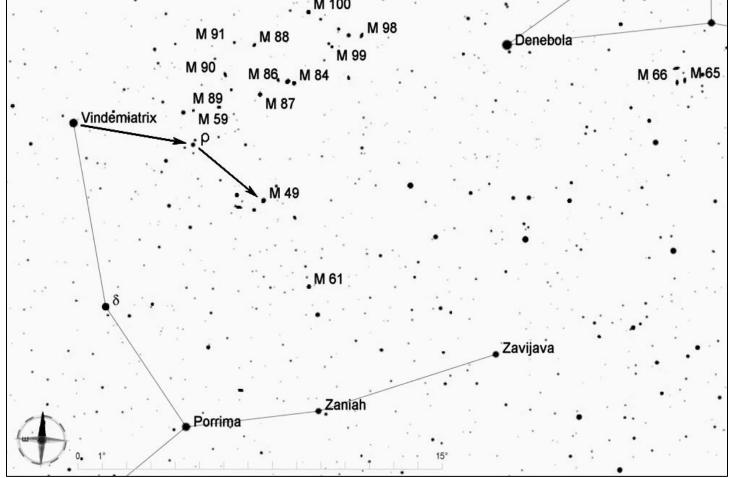
M49 is a large elliptical galaxy, one of the brightest in the Coma-Virgo galaxy cluster and one of the brightest in our sky at magnitude 8.4. It can be seen through any telescope as a round, featureless glow with a very bright center. A foreground star is visible within this halo, to the east of the bright center. The galaxy is about 54 million light years away.



Start by finding the Spring Triangle, which consists of three widely-separated first magnitude stars--Arcturus, Spica, and Regulus. The Spring Triangle is high in the southeast sky in early spring, and in the southwest sky by mid-Summer. (To get oriented, you can use the handle of the Big Dipper and "follow the arc to Arcturus").

For this star hop, look in the middle of the Spring Triangle for Denebola, the star representing the back end of Leo, the lion, and Vindemiatrix, a magnitude 2.8 star in Virgo. The galaxies of the Virgo cluster are found in the area between these two stars.

From Vindemiatrix, look 5 degrees west and slightly south to find  $\rho$  (rho) Virginis, a magnitude 4.8 star that is easy to identify because it is paired with a slightly dimmer star just to its north. From  $\rho$ , move about 4 degrees to the southwest to reach M49.



Star hop from www.skyledge.net by Jim Mazur. Star charts created with Cartes du Ciel.