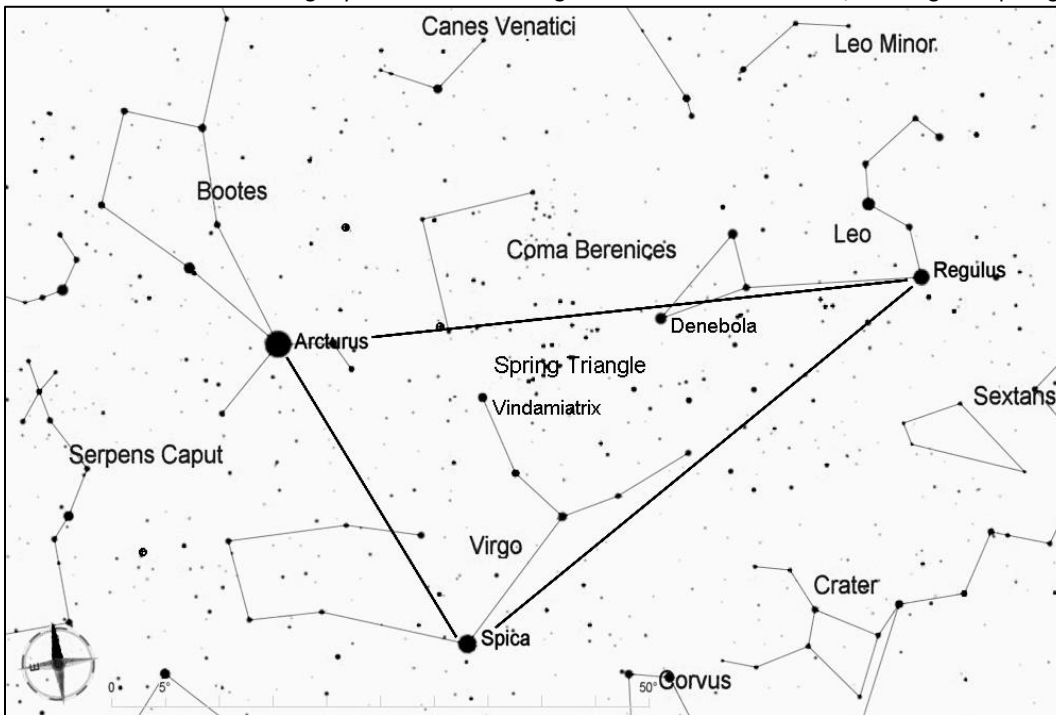


NGC 4565 (Caldwell 38, the Needle Galaxy) and NGC 4559 (Caldwell 36)

Through a telescope of medium or large aperture under dark skies, NGC 4565 is a very impressive sight. The long spindle shape of this edge-on galaxy can extend across the eyepiece's entire field of view, and its dark lane can be seen cutting through the bright nuclear region. Its distance is estimated at about 42 million light years. Just about 2 degrees to its north is NGC 4559, an elongated spiral galaxy that is about half as far 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, begin from brilliant Arcturus (magnitude 0).

From Arcturus, look 5 degrees to the west to find 2nd magnitude Muphrid, then continue along this line twice that distance, and look for α (alpha) Coma Berenices, much dimmer at magnitude 4.3. Following the chart below, then find the equally dim stars β (beta) and γ (gamma) Coma Berenices. From γ , NGC 4559 is 2 degrees east (back toward β) and NGC 4565 is 3 degrees southeast. Through a finderscope, the stars of the Coma Berenices open cluster (circled below) will be easily visible and can help you get oriented.

