## Pi ( $\pi$ ) Bootis and Xi $(\xi)$ Bootis, Double Stars

Pi Bootis is a fairly close double star with two white components, magnitudes 4.9 and 5.8 , separated by 5.4 arcseconds. The pair is about 320 light years away. The distance between the two stars is about 500 astronomical units. The separation of the two components of nearby Xi Bootis is similar, 5.3 arcseconds, but their difference in brightness is greater (magnitude 4.7 and 7.0). Both components of Xi Bootis are smaller and less luminous than our Sun, and they are just over 20 light years away.


Start by finding the Spring Triangle, which consists of three widelyseparated 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 about 6degrees to the southeast for $\mathrm{Pi}(\pi)$ Bootis, which is not hard to see with the naked eye with its combined magnitude of 3.9. Medium to high power through a telescope will show its two components nicely. From Pi, hop about 1 degree northeast to Omicron (o), then another 2.5 degrees to reach $\mathrm{Xi}(\xi)$ Bootis.time to find.


