Boötes

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Arturo

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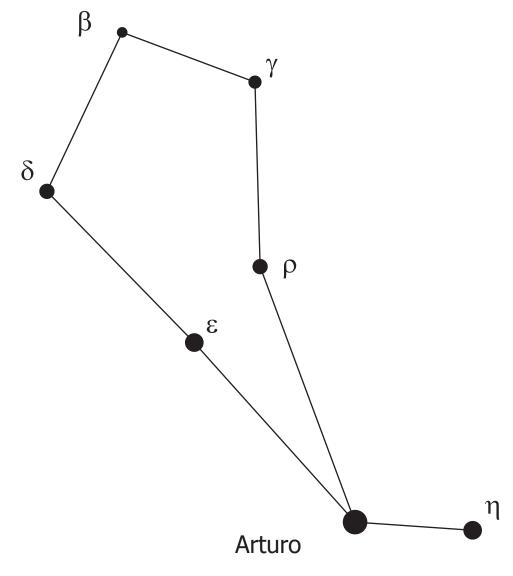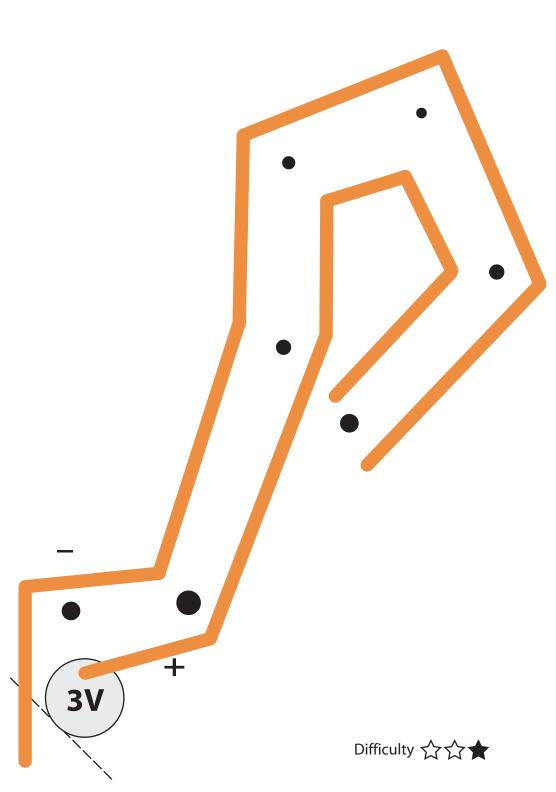PLAY INAF

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Boötes is a large constellation of the Northern Hemisphere, particularly extended in declination. Within its borders, we can find the fourth brightest star of the sky, namely **Arcturus**. The constellation is also identified as the **kite**, or the **herdsman**. The figure of Boötes is domineering, and distinctive of spring and summer skies. It can be observed high on the horizon, almost at the zenit from temperate lower regions of the Northern Hemisphere. This constellation gave origin to the **Quadrantids** meteor shower, so-called in honour of the constellation *Quadrans Muralis* (which is now part of Boötes); it is the richest shower of the years, culminating in the hours before dawn on January 2 and 3.

The most important objects in the sky

Notwithstanding its large dimensions, there are no remarkable non-stellar objects inside Boötes. The galaxies of this sky area are very remote and not very bright. Within the constellation, we find the well-known **Boötes void**, also known as the **Great Nothing**, a region of the sky which has a spherical shape, with a diametre of almost 250 millions light-years, with very few galaxies inside.

NGC 5466 is a globular cluster which is about 51800 light-years away from the Earth. It was discovered by the astronomer William Herschel in 1784. It is located at about 52800 light-years from the Galactic Centre, and is believed to be the source of a stellar flow called **45 Degree Tidal Stream**, discovered in 2006.

Credits: NASA, ESA (Wikisky)

Planetary Systems

The planetary system of τ Boötis is one of the first systems ever discovered. All around this star, a gas giant orbits, which has a mass over six times the mass of the planet Jupiter, along an orbit which is very near to its mother star. HD 128311 is an orange dwarf, around which we know two planetas are placed, with masses which are 2 and 3 times higher than Jupiter's own mass, travelling along orbits which are slightly higher than 1 AU.

Difficulty ☆☆★