

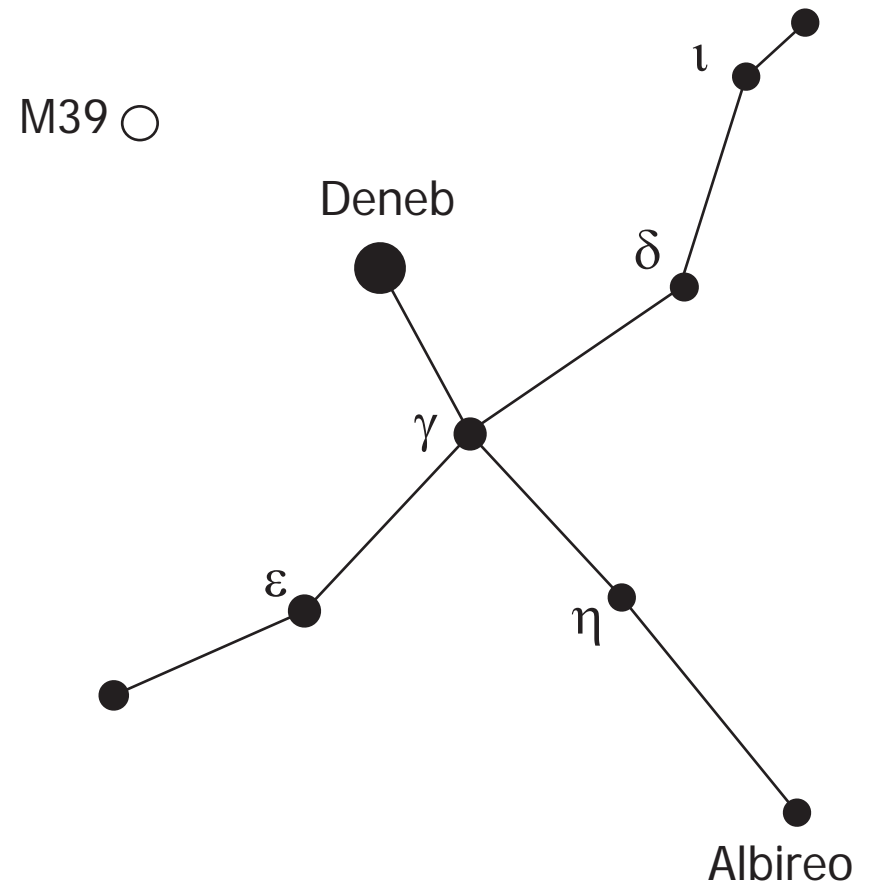


PLAY  INAF

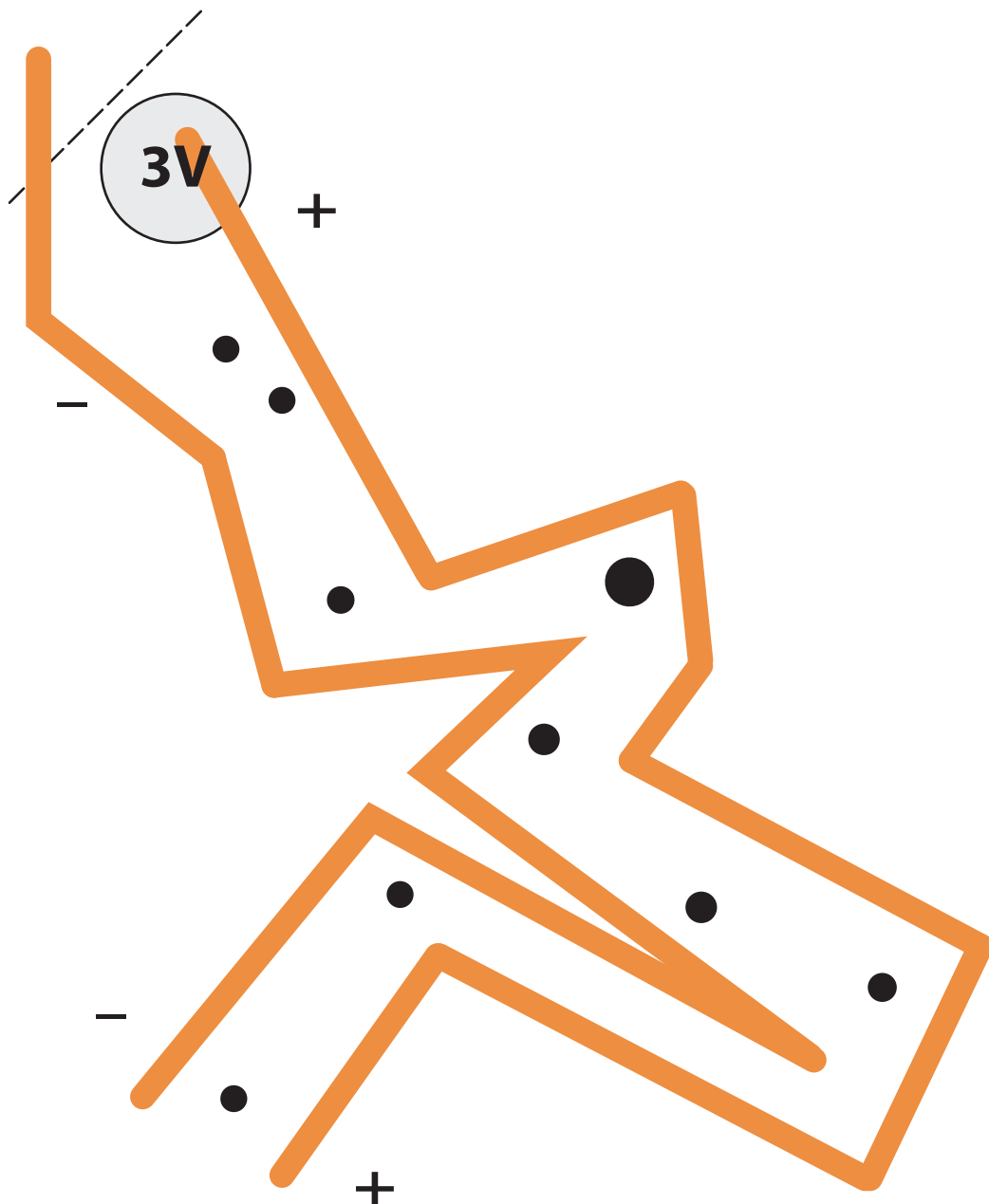


"Let's light up the constellations" by M.Sandri (INAF) - English version by G.Giobbi

Cygnus



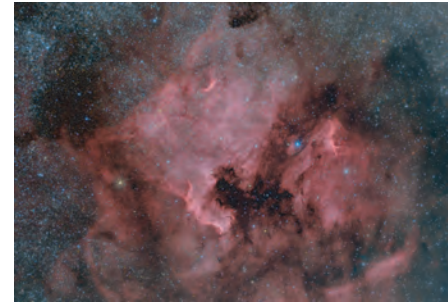
National Institute for Astrophysics (INAF)



Difficulty ★★☆☆

Cygnus (or Northern Cross) is an important, bright and large Northern constellation, which dominates the night sky of the boreal summer. The cross-shaped figure of the swan extends along the summer Milky Way, and is represented as flying south. The brightest star of the constellation, **Deneb**, is the swan's tail, and together with Vega (of Lira) and Altair (of the Eagle), forms one of the peaks of the well-known group of stars known as **Summer Triangle**. The star representing the head of the swan is called **Albireo**, which is actually a double star.

The most important objects of the sky



Credits: Scott Rosen

The **North America Nebula**, or NGC 7000, is located east of Deneb. In order to observe it, you need a dark mountain sky and good binoculars. Together with the nearby **Pelican Nebula**, it constitutes a unique nebular cluster, placed about 1960 light-years from us, in which stellar formation is active.



Credits: Heidi Schweiker, WIYN, NOAO, AURA, NSF

M39 is a bright open cluster; thanks to its luminosity, it can easily be observed even with small instruments. It is about 825 light-years from the Earth, and its age is estimated between 230 and 300 millions years. Its diameter is about 7 light-years, and it contains at least 30 members which are brighter than the 11th magnitude.

Planetary Systems

The most famous planetary system of the constellation is **Gliese 777**, a stellar system located about 50 light-years from the Sun, well-known for its two planets: one with a mass which is 1.5 times Jupiter's own mass (a gas giant), and the other with a solid surface (a rocky planet) with a mass larger than the Earth. The Kepler Mission discovered several planetary systems in this constellation, because the range of the space telescope is just in the direction of Cygnus (and of the nearby Lira).