

MESSIER 39, OPEN CLUSTER IN CONSTELLATION CYGNUS

Messier 39 (also known as M39, or NGC 7092) is an open cluster in the constellation of Cygnus. It was discovered by **Charles Messier** in 1764. M39 is at a distance of about 1,060 light years from Earth and its age is estimated to be from 278 million years.

It is located in the sky at Right Ascension 21h 32.2m, and Declination +48° 26', with a total magnitude (brightness) of 5.5 and size of 29 (arcmin) across. Stellar population of this loose open cluster is about 30 members.

OBSERVATION DATA (J2000 EPOCH)

Constellation Cygnus

Right ascension 21h 31m 42s

Declination +48° 25'

Distance 1,060 ly

Apparent magnitude (V) +5.5

Apparent dimensions (V) 29'

Estimated age 278 Ma

Other designations Messier 39, NGC 7092

Cygnus is a northern constellation, lying on the plane of the Milky Way, deriving its name from the Latinized Greek word for swan. It is one of the most recognizable constellations of the northern summer and autumn, and features a prominent asterism known as the Northern Cross. Cygnus was among the 48 constellations listed by the 2nd century astronomer **Ptolemy**, and it remains one of the 88 modern constellations.

Due to its position on the Milky Way there is an abundance of deep-sky objects, with many open clusters, nebulae of various types and supernova remnants found in Cygnus. Some open clusters can be difficult to make out from a rich background of stars. M39 is an open cluster that is visible to the unaided eye under dark skies. It is loose, with about 30 stars arranged over a wide area; their conformation appears triangular.

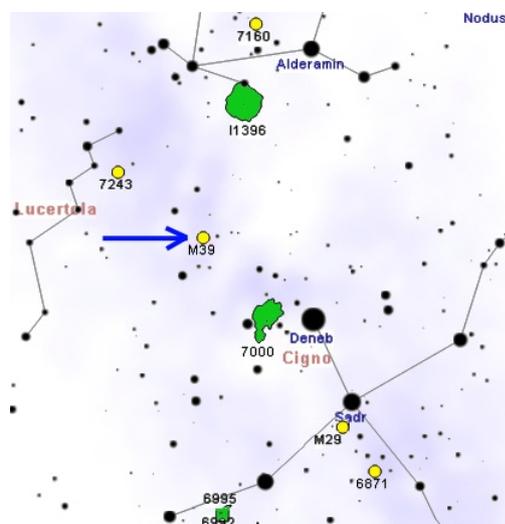
Deneb is the tail star in the constellation and is the Arabic word for tail. It is one of the brightest stars in the night sky and one corner of the Summer Triangle

Cygnus is also known as the Northern Cross. One of the stars of this association, NML Cygni, is one of the largest stars currently known. The constellation is also home to Cygnus X-1, a distant X-ray binary containing a supergiant and unseen massive companion that was the first object widely held to be a black hole. Many star systems in Cygnus have known planets as a result of the Kepler Mission observing this patch of the sky. In addition, most of the eastern part of Cygnus is dominated by the Hercules–Corona Borealis Great Wall, the largest known structure in the observable universe.

GREEK MYTHOLOGY

Cygnus has been identified with several different legendary swans. **Zeus** disguised himself as a swan to seduce Leda, Spartan king Tyndareus's wife, who gave birth to the Gemini, Helen of Troy, and Clytemnestra.

Orpheus was transformed into a swan after his death and placed in the sky with his lyre (Lyra). There is the tragic story of **Phaethon**, the son of **Helios** the Sun god, who wanted to ride his father's Sun chariot but failed, forcing Zeus to destroy the chariot (and Phaethon) with a thunderbolt, causing it to fall to Earth into the river Eridanus. AK, with Wikipedia Notes



Cygnus as depicted in Urania's Mirror, a set of constellation cards published in London c.1825. Surrounding it are Lacerta, Vulpecula and Lyra