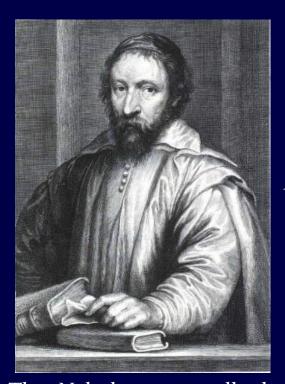
## NEBULA

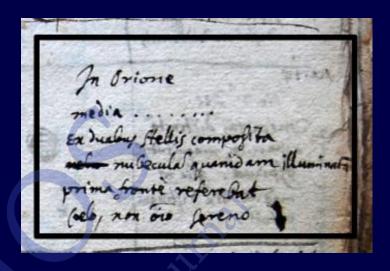
Rahi Nath



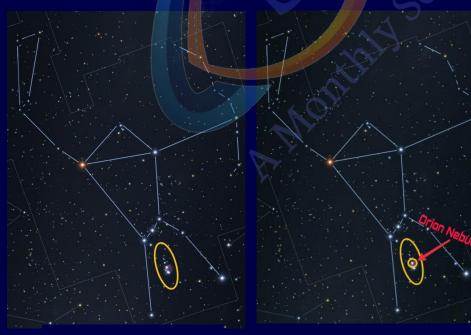
That Nebula was actually the Orion Nebula, the first true nebula discovered by a telescope.

In the year 1610, Nicolas-Claude Fabri de Peiresc discovered a colourful cloud or a fuzzy patch in the night sky which is nothing but a Nebula!

A Nebula is an interstellar cloud of dust.



#### How to locate the Orion Nebula?



**1**. Locate the sword below the Orion's Belt.



2. The bright object in the middle of the Sword is the Orion Nebula.



**ORION NEBULA** 

### NEBULA

Rahi Nath

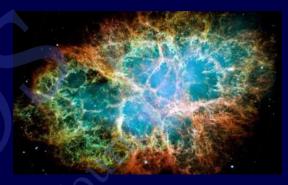
### **Types of Nebulae:**



**1.** Planetary Nebula: When a low mass star expels their outer layers outward at the end of its life it forms a gaseous shell as a remnant, known as the Planetary Nebula.

← The Cat's Eye Nebula

**2. Supernova remnant**: When a high mass star reaches the end of its life the gas falling inward gets so strongly heated that it expands outward causing the star to explode and creates a supernova remnant.



The Crab Nebula >

**3.** Diffuse nebula: The nebula that contains no well defined boundaries is known as diffuse nebula. There are three different types of diffuse nebula such as,

(Left to Right: Witch Head Nebula, Omega Nebula, Horsehead Nebula)



Reflection Nebulae are those who reflect the light of nearby stars.



Emission Nebulae are those who emit light of various wavelengths.



Dark Nebulae are so dense that it obscures the light from object behind it.

# NEBULA

Rahi Nath

#### What are "Stellar Nurseries"?

In space there are some regions where the formations of gas, dust and other materials clump together to form stars.

Nebulae are often one of those star-forming regions (also referred as "Stellar Nurseries"), such as the "Pillars of Creation" in the Eagle Nebula.



The photograph was taken by the **Hubble Space Telescope** on **April 1, 1995**.