

What is an Irregular Galaxy?

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About Irregular Galaxy

- An irregular galaxy is a galaxy that **does not have a distinct regular shape**, like a spiral or an elliptical galaxy.
- They **range from dwarf irregular galaxies with 100 million times the Sun's mass** to large ones **weighing 10 billion solar masses**.
- They also **contain abundant amounts of gas and dust**.
- **Formation:** There are many ways in which an irregular galaxy can be formed.
 - For example, one can **result from a collision between galaxies**. When this happens, **gravitational forces between separate galaxies interact**, which **causes an irregular type of rotation**.

- A **young galaxy can also take an irregular form**, suggesting that **it has not yet reached a symmetrical rotation**.
- **Irregular galaxies born from galaxy interactions** or collisions typically **host a mix of older and younger stars**.

Key Facts about ESO 300-16

- It is an **irregular galaxy** located at a **distance of 28.7 million lightyears** in the southern **constellation of Eridanus**.
- It is **made of many tiny stars all clumped together, surrounded in a diffuse light**. In the central, brightest part there is a bubble of blue gas.
- The galaxy is **surrounded by mostly very small and faint objects**, though there are **bright stars above and to the left of it**, and a **string of galaxies nearby**.

Hubble Space Telescope

- It was built under the supervision of **the National Aeronautics and Space Administration (NASA)** of the United States and was **named after Edwin Hubble**, the foremost American astronomer of the 20th century.
- The HST was **placed into orbit about 600 km (370 miles) above Earth** by the crew of the **space shuttle Discovery on April 25, 1990**.
- It is considered by many to be the **most important scientific tool ever to be built**, having churned out **more than 15 lakh observations** that have been used to publish around 18,000 research papers.
- It is **larger than a school bus in size, has a 7.9 feet mirror**, and **captures stunning images of deep space** playing a major role in helping astronomers understand the universe by observing the most distant stars, galaxies and planets.

Q1) What is a Lightyear?

Light-year is the distance light travels in one year. Light zips through interstellar space at 186,000 miles (300,000 kilometers) per second and 5.88 trillion miles (9.46 trillion kilometers) per year. We use light-time to measure the vast distances of space.

Source: [Hubble Space Telescope captures image of irregular galaxy ESO 300-16](#)

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