



Massive Galaxy Found in Cosmic Dust

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A **massive galaxy**, dating back to the **early universe**, has been spotted in **cosmic dust clouds**.

- The found galaxy has almost equal numbers of stars as the Milky Way, but it is forming new stars at 100 times the rate of the Milky Way galaxy.
- The research has been carried out with the help of **Atacama Large Millimeter Array (ALMA)**.
 - It is an international partnership of the European Southern Observatory (ESO), the U.S. National Science Foundation (NSF) and the National Institutes of Natural Sciences (NINS) of Japan, together with NRC (Canada), NSC and ASIAA (Taiwan), and KASI (Republic of Korea), in cooperation with the Republic of Chile.
 - ALMA is a single telescope composed of 66 high precision antennas located on the **Chajnantor plateau, northern Chile**.
- Further, the **James Webb Space Telescope (JWST)** is expected to enhance the quality of research related to cosmic dust clouds.
 - The James Webb Space Telescope (also called JWST or Webb) will be a **large infrared telescope with a 6.5-meter primary mirror**.
 - The telescope will be launched on an **Ariane 5 rocket** from **French Guiana** in **2021**.
 - It will **study every phase** in the history of our Universe, ranging from the **first luminous glows** after the **Big Bang**, to the **formation of solar systems** capable of supporting life on planets like Earth, to the evolution of our own Solar System.
 - Webb is an **international collaboration** between **NASA**, the **European Space Agency (ESA)**, and the **Canadian Space Agency (CSA)**.

Cosmic Dust

- Cosmic dust consists of tiny particles of solid material floating around in the space between the stars.
- It is more like smoke with small particles varying from collections of a few molecules to grains of 0.1 mm in size.

- It plays an important role in the formation of young stars and planets in space.

Source:TH