



# James Webb Telescope Spots Oldest Dead Galaxy

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The [James Webb Space Telescope \(JWST\)](#) has recently uncovered fascinating insights into the universe's history by capturing the oldest-known dead galaxy, which **ceased star formation approximately 13 billion years ago**, 700 million years after the [Big Bang event](#) that gave rise to the universe.

- The dead galaxy underwent a short but intense period of star formation between 30 and 90 million years, abruptly ceasing star formation between 10 and 20 million years before the JWST's observation.
  - Its mass is comparable to that of the **Small Magellanic Cloud (SMC), a dwarf galaxy near the Milky Way.**
- Insights suggest abundant gas cloud collapses in the early universe facilitated star formation, but internal factors like supermassive black holes or gas depletion can halt this process.
  - Gas depletion may result from rapid consumption without replenishment, leading to galaxies transitioning from star-forming to dormant states.
  - The dynamic nature of the early universe implies potential rejuvenation of dead galaxies, subject to further observations.
- JWST is an international collaboration between NASA, the European Space Agency (ESA) and the Canadian Space Agency which was launched in December 2021.
  - It is **currently at a point in space known as the Sun-Earth L2 Lagrange point**, approximately 1.5 million km beyond Earth's orbit around the Sun.
  - It's the largest, most powerful infrared space telescope ever built and is **successor to the Hubble Telescope.**

**Read more:** [James Webb Telescope spots 6 Monster Galaxies](#)

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