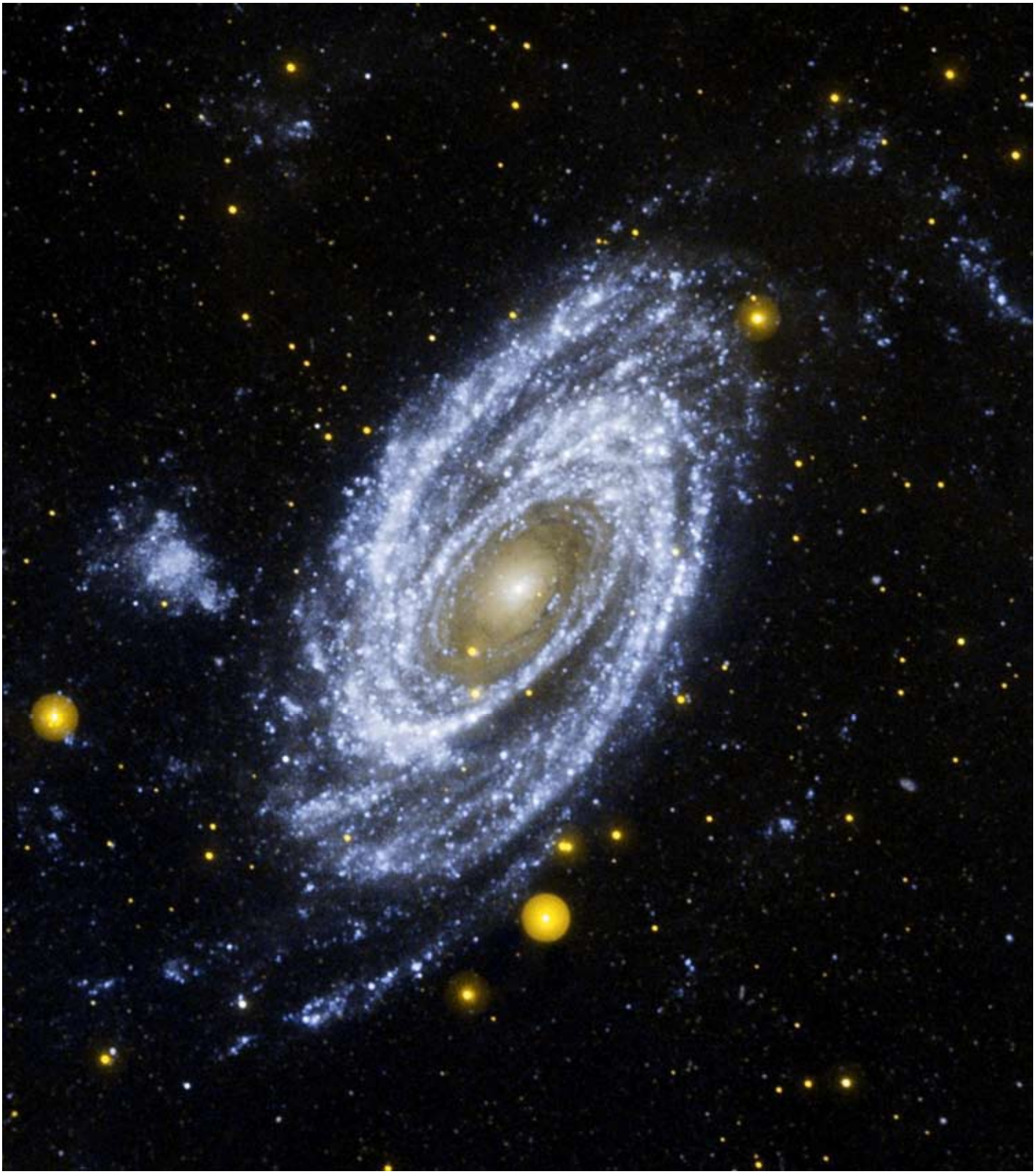


Bode's Galaxy (M81)

Bode's Galaxy (M81)

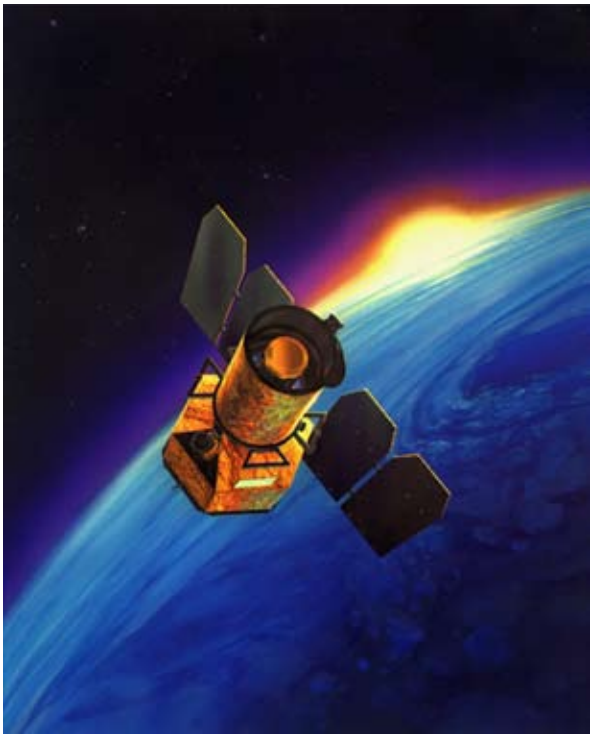
In this GALEX ultraviolet image, the magnificent M81 spiral galaxy is shown at the center. The orbiting observatory spies the galaxy's "sizzling young starlets" as wisps of bluish-white swirling around a central golden glow. The tints of gold at M81's center come from a "senior citizen" population of smoldering stars.

The large fluffy bluish-white material to the left of M81 is a neighboring galaxy called Holmberg IX. This galaxy is practically invisible to the naked human eye. However, it is illuminated brilliantly in GALEX's wide ultraviolet eyes. Its ultraviolet colors show that it is actively forming young stars. The bluish-white fuzz in the space surrounding M81 and Holmberg IX is new star formation triggered by gravitational interactions between the two galaxies. The active star formation in Holmberg IX was a surprise to scientists.

Birthing a Whole New Galaxy?

Some astronomers suspect that the galaxy Holmberg IX is the result of a galactic interaction between M81 and another neighboring galaxy M82. This particular galaxy is especially important because there are a lot of galaxies like Holmberg IX around our Milky Way galaxy. By understanding how Holmberg IX came to be, scientists hope to understand how all the little galaxies surrounding the Milky Way developed.

M81 and Holmberg IX are located approximately 12 million light-years away in the northern constellation Ursa Major. M81 is similar is size and brightness to our own Milky Way. Observations of this region have also been made using NASA's Spitzer (infrared light) and Hubble (visible light) space telescopes. By combining all these views of M81, scientists hope to gain a better understanding about how M81 has developed into the spiral galaxy we see today.



Seeing a Different Universe

The Galaxy Evolution Explorer was launched on April 28, 2003. Its mission is to study the shape, brightness, size and distance of galaxies across 10 billion years of cosmic history. The Explorer's 50-centimeter-diameter (19.7-inch) telescope sweeps the skies in search of ultraviolet-light sources.

Caltech leads the Galaxy Evolution Explorer mission and is responsible for science operations and data analysis. NASA's Jet Propulsion Laboratory, Pasadena, California, manages the mission and built the science instrument. The mission was developed under NASA's Explorers Program managed by the Goddard Space Flight Center, Greenbelt, Maryland. South Korea and France are the international partners in the mission.

For more GALEX images and information, visit http://www.galex.caltech.edu.