Object:
The Antennae • NGC 4038/NGC 4039

Distance from Earth:
43 million light-years

Size:
61,000 light-years across

Telescopes:
Chandra X-ray Observatory, Hubble Space Telescope, and Spitzer Space Telescope

Light:
X-ray (blue), infrared (red), and visible light (yellow)

Description:
The Antennae Galaxies are actually two colliding galaxies, among the youngest pairs astronomers have observed. The two spiral galaxies started to interact a few hundred million years ago. This collision sparked star formation (bright blue and pink) in both galaxies. The bright yellow areas to the left and right of the image center are the cores of the original galaxies. The Antennae Galaxies may be a preview of how our Milky Way Galaxy and the neighboring Andromeda Galaxy could collide in several billion years.

Credit:

Telescope Type:
Spitzer Space Telescope

Launched into orbit around the Sun in 2003, the Spitzer Space Telescope was designed to detect infrared radiation, which humans cannot see. Many of the instruments on Spitzer had to be cooled with liquid helium to operate. The coolant ran out in May 2009, but the IRAC camera, which took most of the Spitzer images in this exhibit, does not need cooling and continues to operate.

The Spitzer Space Telescope is named after Lyman Spitzer Jr. (1914–1997), an early advocate for a space observatory and a pioneer in early studies of interstellar gas and dust.