



**Chandra X-ray
Observatory Center**

Harvard-Smithsonian Center for Astrophysics
60 Garden St. Cambridge, MA 02138 USA
<http://chandra.harvard.edu>

NGC 6872: A pair of colliding galaxies at a distance of about 180 million light years from Earth.
(Credit: X-ray: NASA/CXC/SAO/M.Machacek; Optical: ESO/VLT; Infrared: NASA/JPL/Caltech)

Caption: This composite image of a collision between two galaxies, NGC 6872 and IC 4970, contains X-rays from Chandra (purple), infrared data from Spitzer (red), and optical data from the Very Large Telescope (red, green and blue.) When combined, these data reveal that IC 4970, the small galaxy at the top of the image, is feeding its supermassive black hole by drawing cold gas from its partner galaxy, the spiral NGC 6872. These two galaxies are in the process of merging, allowing the reservoir of fuel to be supplied to the growing black hole.

Scale: Image is 347 arcsec across (310,000 light years).

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory