



**Chandra X-ray
Observatory Center**

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

M101: A spiral galaxy located about 21 million light years from Earth.
(Credit: X-ray: NASA/CXC/SAO; IR & UV: NASA/JPL-Caltech; Optical: NASA/STScI)

Caption: This composite image of M101 (aka, the "Pinwheel Galaxy") combines data from four of NASA's space-based telescopes. X-rays from Chandra (purple) reveal the hottest and most energetic areas due to exploded stars, superheated gas, and material falling toward black holes. Infrared data from Spitzer (red) shows dusty lanes in the galaxy where stars are forming, while Hubble data (yellow) traces the light from stars. Ultraviolet emission detected by GALEX (blue) shows emission from young stars.

Scale: Image is 16.8 arcmin across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory