



**Chandra X-ray
Observatory Center**

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

M51: A galaxy located about 30 million light years from Earth.
(Credit: X-ray: NASA/CXC/SAO/R. DiStefano, et al.; Optical: NASA/ESA/STScI/Grendler)

Caption: Astronomers have found evidence for a possible planet candidate in the M51 ("Whirlpool") galaxy, representing what could be the first planet detected outside of the Milky Way. Chandra detected the temporary dimming of X-rays from a system where a massive star is in orbit around a neutron star or black hole (shown in the artist's illustration). This dimming is interpreted as being a planet that passed in front of an X-ray source around the neutron star or black hole. A composite image of M51 with X-rays from Chandra (purple and blue) and optical light from NASA's Hubble Space Telescope (red, green, and blue) contains a box that marks the location of the possible planet candidate.

Scale: The image is about 6 arcmin (49,000 light years) across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory