



Chandra X-Ray Observatory Center Harvard-Smithsonian Center for Astrophysics 60 Garden Street, Cambridge, MA 02138 http://chandra.harvard.edu

Andromeda Galaxy (M31): Our nearest neighbor spiral galaxy at a distance of two million light years. Credit: NASA/CXC/SAO

This X-ray image shows the central portion of the Andromeda Galaxy. The blue dot in the center of the image is an unusual "cool" million degree X-ray source of unknown nature. Just above this cool source is a source (yellow) that is thought to be due to X-rays from matter swirling toward a supermassive black hole in the nucleus of the galaxy. This black hole contains the mass of 30 million suns. Numerous other X-ray sources are also apparent. Most of these are probably due to X-ray binary systems, in which a neutron star or black hole is in a close orbit around a normal star.

Scale: Image is 1 arcmin on a side. Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory