M60-UCD1: A galaxy about 54 million light years from Earth. (Credit: X-ray: NASA/CXC/MSU/J.Strader et al, Optical: NASA/STScI)

Caption: The densest galaxy in the nearby Universe may have been found. The galaxy, known as M60-UCD1, is located near a massive elliptical galaxy NGC 4649, also called M60. This composite image of M60 and the region around it presents X-rays from Chandra (pink) and optical data from Hubble (red, green, and blue). The Chandra image shows hot gas and double stars containing black holes and neutron stars, and the HST image reveals stars in M60 and neighboring galaxies including M60-UCD1. The inset is a close-up view of M60-UCD1 in an HST image. The density of stars in M60-UCD1 is about 15,000 times greater than found in Earth’s neighborhood in the Milky Way, meaning that the stars are about 25 times closer.

Scale: Image is 3.2 arcmin on a side (about 50,000 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory