NGC 3115: A lenticular galaxy located about 32 million light years from Earth.
(Credit: X-ray: NASA/CXC/Univ. of Alabama/K.Wong et al, Optical: ESO/VLT)

**Caption:** This composite image contains X-rays from Chandra (blue) and optical data from the VLT (gold) of the galaxy NGC 3115. Using the Chandra data, the flow of hot gas toward the supermassive black hole in the center of this galaxy has been imaged. This is the first time that clear evidence for such a flow has been observed in any black hole. The new Chandra data also supports the previous optical observations that suggest that NGC 3115's black hole has a mass of about two billion times that of the Sun. This would make NGC 3115 the host of the nearest billion-solar-mass black hole to Earth.

**Scale:** Full image: 7.5 arcmin (about 70,000 light years) | Inset image: 27 arcsec across (about 4,150 light years)

Chandra X-ray Observatory ACIS Image

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*