



**Chandra X-ray
Observatory Center**

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XBONGs: A class of objects that are optically "normal" but bright in X-rays
(Credit: X-ray: NASA/CXC/SAO/D. Kim et al.; Optical/IR: Legacy Surveys/D. Lang (Perimeter Institute))

Caption: A survey has revealed hundreds of previously unidentified black holes using data from the Chandra Source Catalog and the Sloan Digitized Sky Survey (SDSS). Researchers compared the X-ray and optical data for a class of objects known as "XBONGs" (X-ray bright, optically normal galaxies) to reveal about 400 supermassive black holes. This four-panel graphic shows two of these XBONGs in X-rays from Chandra and optical light from SDSS. This result helps explain some unusual properties of XBONGs as well as provide a more accurate census of supermassive black holes that exist in the centers of most large galaxies.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory