



**Chandra X-ray
Observatory Center**

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PKS 0745: A galaxy cluster about 1.3 billion light years from Earth with a large elliptical galaxy in its center.

(Credit: NASA/CXC/Stanford/Hlavacek-Larrondo, J. et al)

Caption: The black hole at the center of this galaxy is part of a survey of 18 of the biggest known black holes in the universe. This large elliptical galaxy is in the center of the galaxy cluster PKS 0745-19, which is shown in this composite image containing X-rays from Chandra (purple) and optical data from Hubble (yellow). Researchers found that the black holes in the survey may be about ten times more massive than previously thought. This includes at least ten that could weigh between 10 and 40 billion times the mass of the sun, making them "ultramassive" black holes.

Scale: Image is 1.4 arcmin across (about 511,000 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
