



**Chandra X-ray
Observatory Center**

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RGG 118: The smallest supermassive black hole ever detected in the center of a galaxy.
(Credit: X-ray: NASA/CXC/Univ of Michigan/V.F.Baldassare, et al; Optical: SDSS)

Caption: The smallest supermassive black hole ever detected in the center of a galaxy has been identified using observations with Chandra and the 6.5-meter Clay Telescope. The host galaxy for the tiny heavyweight black hole is a dwarf disk galaxy called RGG 118, shown in an image from the Sloan Digital Sky Survey. The inset is a Chandra image of the galaxy's center, showing hot gas near the black hole. This oxymoronic object could provide clues to how much larger black holes formed along with their host galaxies 13 billion years or more in the past.

Scale: Image is 3.2 arcmin across (about 317,000 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory