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NGC 2276: A galaxy about 100 million light years away with an intermediate-mass black hole in one of its spiral arms.

(Credit: X-ray: NASA/CXC/SAO/M.Mezcua et al & NASA/CXC/INAF/A.Wolter et al; Optical: NASA/STScl and DSS; Inset: Radio: EVN/VLBI

Caption: A newly discovered object in the galaxy NGC 2276 may prove to be an important black hole that helps fill in the evolutionary story of these exotic objects. This source, known as NGC 2276-3c, is likely an intermediate-mass black hole with about 50,000 times the mass of the Sun. The main graphic shows a composite image of the whole galaxy, with X-rays from Chandra (pink) and optical data (red, green, and blue). The inset zooms into just NGC 2276-3c and reveals its emission in radio waves, including a jet produced by the black hole that appears to be squelching star formation. By combining the X-ray and radio data, astronomers are learning about the properties of this object and how it influences its surroundings.

Scale: Image is 4.5 arcmin across (about 140,000 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory