



**Chandra X-ray
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J0045+41 in M31: An object possibly containing two supermassive black holes about 2.6 billion light years away.

(Credit: X-ray: NASA/CXC/Univ. of Washington/T.Dorn-Wallenstein et al.; Optical: NASA/ESA/J. Dalcanton, et al. & R. Gendler)

Caption: Scientists have discovered that an object previously thought to be part of the nearby Andromeda galaxy is actually a thousand times farther away. In addition, this source, known as J0045+41 for short, may contain two supermassive black holes in very close orbit around one another. This graphic shows Chandra data (blue in inset) in context of an optical image from Hubble. Other optical data from Gemini North and the Palomar Transient Factory project were used to reveal the true identity of J0045+41.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
