



**Chandra X-ray
Observatory Center**

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RX J1131-1231: A quasar located about 6 billion light years from Earth.
(Credit: X-ray: NASA/CXC/Univ of Michigan/R.C.Reis et al; Optical: NASA/STScI)

Caption: Multiple images of a distant quasar known as RX J1131-1231 are visible in this combined view from Chandra (pink) and Hubble (red, green, and blue). The Chandra data, along with data from ESA's XMM-Newton, were used to directly measure the spin of the supermassive black hole powering this quasar. Black holes are defined by just two simple characteristics: mass and spin. At a distance of 6 billion light years, this is the most distant black hole where such a measurement has been made, allowing for an important advance in understanding how black holes grow over time.

Scale: Image is 1.2 arcmin across (about 1.6 million light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
