Circinus Galaxy: a spiral galaxy about 13 million light years away.
Credit: NASA/Penn State/F.Bauer et al.

Chandra's observations of a large, nearby galaxy in the constellation of Circinus presents a new view of both the galaxy's supermassive black hole and a host of potential smaller black holes sprinkled throughout its spiral arms. The X-ray emission is resolved into a number of distinct components, many of which are associated with a central black hole. A bright, compact emission source is present at the center of the image and that nuclear source is surrounded by a diffuse X-ray halo that extends out several hundred light years. The Chandra results also include the first detection of a black hole's periodic variability in X-rays outside our galactic neighborhood.

Scale: Image is 80 arcsec per side.
Chandra X-ray Observatory ACIS Image