Sagittarius A East: A supernova remnant located near the black hole at the center of the Milky Way.
Credit: NASA/Penn State/G. Garmire et al.

For the first time, Chandra has resolved the complex structures at the center of our galaxy through X-ray observations. In addition to the super-massive black hole, astronomers have found evidence for the remains of a massive star that exploded some 10,000 years ago. While dozens of such supernova remnants are known in our galaxy, the proximity of Sgr A East to the black hole in the Milky Way’s center makes it important. By detailing the association between Sgr A East and Sgr A*, astronomers hope to learn if this is an example of a common relationship between supernovae and black holes throughout the Universe.

Scale: Image is 8.4 arcmin on a side.
Chandra X-ray Observatory ACIS Image

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