



**Chandra X-ray  
Observatory Center**

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**NGC 4424:** A spiral galaxy located about 54 million light-years from Earth.  
(Credit: X-ray: NASA/CXC/Swinburne Univ. of Technology/A. Graham et al.; Optical: NASA/ESA/STScI)

**Caption:** Astronomers may have witnessed a smaller galaxy colliding with a larger spiral galaxy and delivering a supermassive black hole. The main panel shows a wide-field view of the larger galaxy, called NGC 4424, in optical light from Hubble. NGC 4424 is also expected to host a supermassive black hole. The inset features a close-up view of a star cluster, nicknamed Nikhuli, thought to remain behind after the small galaxy has had most of its stars stripped away. Optical data (red) that has been specially processed to highlight faint features shows Nikhuli, and Chandra X-ray data (blue) gives the location of its supermassive black hole. The two supermassive black holes are likely to eventually collide and merge with each other.

**Scale:** Main image is 2.9 arcmin (45,100 light-years) across.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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