



**Chandra X-ray  
Observatory Center**

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**Abell 2384:** A pair of galaxy clusters located about 1.2 billion light years from Earth.  
(Credit: X-ray: NASA/CXC/SAO/V.Parekh, et al. & ESA/XMM; Radio: NCRA/GMRT)

**Caption:** Abell 2384 contains the giant structures that can result when two galaxy clusters collide. A superheated gas bridge is seen in this composite image with X-rays from Chandra and XMM-Newton (blue), radio emission from the Giant Metrewave Radio Telescope (red) and optical data from the Digitized Sky Survey (yellow). This multi-wavelength view reveals the effects of a jet shooting away from a supermassive black hole in the center of a galaxy in one of the clusters. The jet is so powerful that it is bending the shape of the gas bridge, which extends for over 3 million light years and has the mass of about 6 trillion Suns.

**Scale:** Image is about 50 arcmin (17 million light years) across.

*Chandra X-ray Observatory ACIS Image*

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*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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