



**Chandra X-ray
Observatory Center**

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Abell 2052: A cluster of galaxies located about 480 million light years from Earth.
(Credit: X-ray: NASA/CXC/BU/E.Blanton; Optical: ESO/MLT)

Caption: This image shows Abell 2052 in a composite of data with X-rays from Chandra (blue) and optical data from the VLT (gold). A huge spiral structure in the hot gas – spanning almost a million light years – is seen around the outside of the image. This spiral was created when a small cluster of galaxies smashed into a larger one that surrounds the central elliptical galaxy. The collision caused the hot gas in the cluster to be "sloshed" back and forth, similar to wine sloshing in a glass that was jerked sideways. This sloshing has important effects including impacting how the giant elliptical galaxy and its supermassive black hole grow.

Scale: Image is 9.3 arcmin across (about 1.27 million light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
