



**Chandra X-ray  
Observatory Center**

Harvard-Smithsonian Center for Astrophysics  
60 Garden St. Cambridge, MA 02138 USA  
<http://chandra.harvard.edu>

**Abell 2744:** A collision of galaxy clusters about 3.5 billion light years away.

(Credit: X-ray: NASA/CXC/ITA/INAF/J.Merten et al, Lensing: NASA/STScI; NAOJ/Subaru; ESO/VLT, Optical: NASA/STScI/R.Dupke)

**Caption:** This composite image features one of the most complicated and dramatic collisions between galaxy clusters ever seen. Known officially as Abell 2744, this system has been dubbed “Pandora’s Cluster” because of the wide variety of different structures found. Data from Chandra (red) show gas with temperatures of millions of degrees. In blue is a map showing the total mass concentration (mostly dark matter) based on data from the Hubble Space Telescope, the Very Large Telescope (VLT), and the Subaru telescope. Optical data from HST and VLT also show the constituent galaxies of the clusters. Astronomers think at least four galaxy clusters coming from a variety of directions are involved with this collision.

**Scale:** Image is 6.7 arcmin across (5.9 million light years)

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*