



**Chandra X-ray
Observatory Center**

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

El Gordo: A galaxy cluster located about 7.2 billion light years from Earth.

(Credit: X-ray: NASA/CXC/Rutgers/J.Hughes et al, Optical: ESO/MLT/Pontificia Universidad. Catolica de Chile/L.Infante & SOAR (MSU/NOAO/UNC/CNPq-Brazil)/Rutgers/F.Menanteau, IR: NASA/JPL/Rutgers /F.Menanteau)

Caption: This galaxy cluster, which has been nicknamed "El Gordo" for the "big" or "fat" one in Spanish, is a remarkable object. Found in the distant Universe by Chandra and the Atacama Cosmology Telescope, El Gordo appears to be the most massive, the hottest, and gives off the most X-rays of any known cluster at its distance or beyond. In this composite image of El Gordo, X-rays are blue, optical data from the Very Large Telescope are red, green, and blue, and infrared emission from Spitzer is red. The comet-like shape of the X-rays, along with optical data, show that El Gordo is actually the site of a collision between two galaxy clusters, similar to the well-known Bullet Cluster.

Scale: Image is 5.3 arcmin across. (8 million light years across.)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory