



**Chandra X-ray  
Observatory Center**

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**DLSCl J0916.2+2951:** A merger of galaxy clusters about 5.2 billion light years from Earth.  
(Credit: X-ray: NASA/CXC/UCDavis/W.Dawson et al; Optical: NASA/STScI/UCDavis/W.Dawson et al.)

**Caption:** This composite image shows Chandra (red) and Hubble (yellow and white) data of the galaxy cluster system that has been nicknamed the "Musket Ball" cluster. Astronomers call it this because the newly discovered cluster is older and slower than the Bullet Cluster, a famous system in which "normal" matter has been wrenched apart from dark matter. Chandra detects the normal matter as hot gas, while optical emission reveals the presence of dark matter through the effect of gravitational lensing (blue). DLSCl J0916.2+2951 is further along in its evolution than the Bullet Cluster, giving scientists valuable insight into a different phase of how galaxy clusters -- the largest known objects held together by gravity -- grow and change after major collisions.

**Scale:** Image is 6.4 arcmin across. (8 million light years across.)

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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