



**Chandra X-ray  
Observatory Center**

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**MACS J1149.5+2233:** A system of merging galaxy clusters located about 5 billion light years from Earth.  
(Credit: X-ray: NASA/CXC/SAO; Optical: NASA/STScI; Radio: NSF/NRAO/AUI/VLA)

**Caption:** This galaxy cluster, dubbed MACS J1149 for short, was one of six that have been studied as the part of the “Frontier Fields” project. This research effort has obtained long observations of galaxy clusters with powerful telescopes that detected different types of light. This image of MACS J1149 combines X-rays from Chandra (diffuse blue), optical data from Hubble (red, green, blue), and radio emission from the Very Large Array (pink).

**Scale:** Image is 3.2 arcmin (about 4.7 million light years) across

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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