



Chandra Science Highlight

Abell 2125: A Massive Galaxy Cluster about 3 Billion Light Years from Earth



- The bright gas cloud on the upper left is the core of the cluster and envelopes hundreds of galaxies, several of which are being stripped of their gas as they fall through surrounding high-pressure hot gas. This stripping process has enriched the core cluster's gas in heavy elements such as iron.
- The bright large cloud on the lower right envelopes hundreds of galaxies and has an extraordinarily low concentration of iron atoms. It is thought that this cloud, which is several million light years from the core cluster, has not yet been enriched by the stripping of iron-rich gas from its member galaxies.
- Observations of A 2125 provide a rare glimpse into the early steps in the process of building one of the most

massive objects in the universe.

Reference: Q.D. Wang et al. 2004, Astrophys.J. (in press); see also astro-ph/0404602

CHANDRA CATCHES EARLY PHASE OF COSMIC ASSEMBLY
Chandra's image of the galaxy cluster Abell 2125 reveals a complex of several massive multimillion degree Celsius gas clouds in the process of merging. Ten of the point-like sources are associated with galaxies in the cluster and the rest are probably distant background galaxies. The small bright feature in the extreme lower right-hand corner is probably a background galaxy cluster not associated with Abell 2125.

Credit: X-ray: NASA/CXC/U.Mass/Q.Wang et al.