

New X-Ray Observations of a Galaxy Cluster

We have made satellite observations of a cluster of galaxies at redshift 1 in the 2 to 10 keV X-ray band. The X-ray emission, which is not spatially resolved, is found to be characterised by thermal bremsstrahlung with a temperature (in the observer's frame) of 3 keV. An emission line with an equivalent width of 0.6 keV and an energy of 3.4 keV (again in the observer's frame) is also detected. The bolometric flux of the cluster is measured to be 3×10^{-14} erg cm⁻² s⁻¹. We anticipate that these observations are sufficient to determine the mass of iron in the cluster.

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