Chandra Observation of the Central Region of A1060

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Abstract

We observed the central region of the cluster of galaxies, Abell 1060 ($z = 0.0114$), with *Chandra* for about 30 ksec. The image reveals a very flat core in the cluster center, accompanied by two giant elliptical galaxies, NGC 3311 and NGC 3309. The energy spectra of the emission from these ellipticals can both be described by a thermal emission with a temperature of about 1 keV, and are clearly softer than that of the surrounding ICM ($kT \sim 3$ keV). The X-ray sizes of the elliptical galaxies have a radius of only about 5 kpc, which is significantly smaller than the optical images. The compact ISM in X-rays suggests that the gas may be stripped by the surrounding hot ICM and the remaining gas may be pressure confined. We will discuss about the interaction process between the ISM and ICM at the cluster center based on these data.

CATEGORY: CLUSTERS OF GALAXIES