

측과 IRAF를 이용한 관측자료 reduction을 수행하였다. 각 은하의 관측은 150 μm long slit과 300 groove grating을 이용하였으며, 3,500 \AA ~7,000 \AA 영역에 대해 blue PCA만으로 grating angle을 조정하여 blue (3,500~5,500 \AA)와 red (4,900~7,200 \AA)로 나누어 관측하였다.

강한 방출선을 갖는 ESO 386-G19 등 5개의 은하에 대하여 blue와 red 영역의 관측을 완성하였다. 불규칙은하인 ESO 289-G04를 제외한 나머지 7개는 방출선이 없거나 매우 약하게 나타나 BCG가 아닌 것으로 확인 되었다. 관측이 완성된 5개의 은하중 ESO 289-G08 등 2개는 BCG가 아닌 Starburst 또는 Seyfert galaxy일 가능성이 높으며, ESO 102-G14 등 3개는 BCG의 spectral feature를 보였다.

The X-ray Spectra of Galaxies: Intrinsic Absorption and Spectral Profiles of Elliptical Galaxies.

Dong-Woo Kim

Department of Astronomy and Space Science, Chungnam National University

We report recent finding of cool self-absorbed cores in the two elliptical galaxies NGC 507 and NGC 499. The *Einstein* IPC data suggest that these galaxies have significant amount of absorbing HI column density which is unusual for gas poor elliptical galaxies. We also found temperature and column density gradients in a way that the core has a lower temperature and higher column density than the outer region. This is strongly suggestive that we are directly witnessing the effect of cooling flows.

The Diffusion Coefficient of Relativistic Particles in an Intracluster Medium of the Coma Cluster of Galaxies

K.-T. Kim

*Department of Astronomy and Space Science
Chungnam National University, Daejeon 305-764, Korea*

In the presence of synchrotron losses, diffusion of an ensemble of relativistic particles in an intracluster medium is investigated. The diffusion coefficient in the medium is found to be constrained by $28.8 \pm 0.4 \leq \log D \leq 30.5 \pm 0.4 \text{ cm}^2 \text{ s}^{-1}$, with the energy dependency of $D_0 e^{\mu}$ of $\mu = -0.4 \pm 0.2$ as the previous observations suggested. As an important implication of the result, the brightest head-tail radio source NGC 4869, whose radio tail structure is indicative for its orbit within the cluster core, is considered to be the major contributor of particles for the formation of the Coma radio halo.

Bulge Morphology of A Barred Galaxy NGC 2787

Hong Bae Ann¹ and Nam Kyu Park²

¹ *Department of Earth Science, Pusan National University*

² *Institute of Space Science and Astronomy*

Multi-band photographic surface photometry of a barred galaxy NGC 2787 has been conducted to analyse the bulge morphology of the galaxy in detail, by making use of the Kiso plate library