[구GC-27] Abundance Anomalies and Star Formation History of merging BCDs

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We present elemental abundances of 95 blue compact dwarf galaxies (BCDs) at z=0.2~0.35 using the Sloan Digital Sky Survey (SDSS) DR7. We derived element abundances using Te method. We found that nitrogen abundance of merging BCDs are more enriched than normal BCDs by fast rotating young massive star. On the other hand, neon and oxygen abundances for merging BCDs are slightly lower than the normal BCDs.This might be result from the dilution by metal-poor gas infall during the interaction. This means that merging BCDs undergone star formation event for a long time than normal BCDs and we trying to explain using STARLIGHT code and various star formation rates (SFRs) ratios. At a result, merging BCDs have older stellar population (>10 Myr) more than normal BCDs and have clear distinction in elements abundances versus Ha/UV diagram. We also discuss the characteristics of post merger candidate using FUV to NUV ratios.

[구GC-28] Analysis of X-ray luminosities of isolated elliptical galaxies in SDSS

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Park, Gott, & Choi (2008) found that when a galaxy is located within the virial radius from its closest neighbor and the neighbor is an elliptical, the probability of the galaxy to be an elliptical is very sensitive to the large-scale background density over a few Mpc scales. They suggested that the large-scale dependence can be arise if the temperature of a diffuse hot gas held by elliptical galaxies are higher in higher density environment. In this study, to understand the large-scale environment affects the X-ray properties of individual galaxies, we investigated the dependence of the X-ray luminosities of the elliptical galaxies on the large-scale environment using X-ray and optical data which we selected from the ROSAT All-Sky Survey and the Sloan Digital Sky Survey Data Release 7. To exclude galaxies embedded in an intra-group/cluster medium which could enhance their observed X-ray luminosity, we used isolated elliptical galaxies.