[포GC-09] Green Functions for Compton Transmitted Hard X-rays from Active Galactic Nuclei

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Cosmic hard X-ray background radiation is known to exhibit a broad peak around 30 keV. Currently it is believed that hard X-ray background radiation is mostly contributed by active galactic nuclei(AGN). A significant fraction of AGN are obscured by a thick neutral component, for which Compton down scattering of hard X-rays can be important. We compute Green functions for Compton scattered hard X-rays ranging from 10 keV to 1 MeV using a Monte Carlo technique. The emission source is surrounded by two parallel slabs with Thomson optical depth τ =5. Green functions for monochromatic sources with hνo = 0.1, 0.2, 0.5, 1, 2 mec2 are produced from our Monte Carlo simulations. We provide our fits to the Monte Carlo Green functions and discuss possible applications.

[포GC-10] Radio Light Curves of BL Lacertae

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We present a preliminary result of long-term monitoring of BL Lacertae. The observations have been carried out several times with snap-shot mode. The annual behavior of BL Lacertae was typical of quiet states. We discuss a possible correlations of the radio to X-ray and gamma-ray monitoring observations.