ASCA Observation of Low Mass X-ray Binary X1254-69*

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We present the results of ASCA observation of low mass X-ray binary X1254-69, which is a dipping and bursting source. The spectral fits using a model power law with exponential cutoff give photon index α =0.97 \pm 0.04 and absorption column density $N_{\rm H}$ =(2.54 \pm 0.08) \times 10²¹ cm⁻², these are very similar to that of observed by EXOSAT. In addition, we find also that the calculated flux, \sim 8.1 \times 10⁻¹⁰ ergs cm⁻²s⁻¹, is comparable with the results of EXOSAT in the same energy band of 1-10keV. However, no significant features associated with the intensity dip as well as with the burst are detected in the present observation. This means tht depth of the dip is highly variable. We suggest that the size of blocking material is not related in a simple manner to the mass accretion rate.

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X-Ray and Optical Light Curves of the Magnetic Cataclysmic Variables

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Magnetic cataclysmic variables consist of a mass-donating late type main sequence star and a mass accreting white dwarf. Using a phenomenological model of Kim & Beuermann (1995) we consider the propagation of the emitted X-ray radiation through the magnetosphere of the reprocessing of this X-rays by photoabsorption in the optical spectral range. Our results show that X-ray and optical modulation sensitive to model parameters and these dependence can be used to obtain improved insight into the geometry of such systems.

CCD Photometry of the Globular Clsters M13 and M71

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We present deep CCD photometry in the B and V filter bands for two globular clusters, M13 and M71. Observation were made on October 1994 and March 1995 using the Mauna Kea 2.2m telescope with 2048 × 2048 CCD. Using the DAOPHOT