

X-ray Binary Populations in a Cosmological Context, Including NuSTAR Predictions

The new ultradeep 4 Ms Chandra Deep Field South has afforded the deepest view ever of X-ray binary populations. We report on the latest results on both LMXB and HMXB evolution out to redshifts of approximately four, including comparison with the latest theoretical models, using this deepest-ever view of the X-ray universe with Chandra. The upcoming NuSTAR mission will open up X-ray binary populations in the hard X-ray band, similar to the pioneering work of Fabbiano et al. in the Einstein era. We report on plans to study both Local Group and starburst galaxies as well as the implications those observations may have for X-ray binary populations in galaxies contributing to the Cosmic X-ray Background.