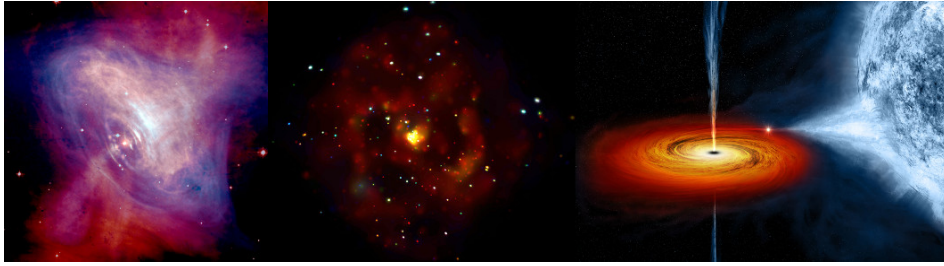


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## Understanding the large amplitude X-ray variation of GRS 1915+105 by RXTE-PCA and ASTROSAT-LAXPC

To understand the X-ray spectra of one of the superluminal X-ray binaries, we used RXTE/PCA and AstroSat/LAXPC data of GRS 1915+105. Where we can see significant photon counts variability in the X-ray light curves within 3.0–80.0 keV energy range. Out of 12 classes of X-ray variability, only few classes have significant higher and lower photons count. So we extract the higher (High flux) and lower (Low flux) photon counts from the light curves for different observations (For  $\alpha$ ,  $\lambda$ ,  $\theta$  classes). We jointly fitted those extracted spectra with Compton scattered multi-temperature disk blackbody (index is 0.75) model along with some absorptions simultaneously for each observation, which give best fit in the 3.0–22.0 keV energy range. We observed that, some relativistic reflection component is also there. These variations of photon counts are in few milliseconds to few seconds, it is possible that these three components are independent for all these classes even without any changes in parameters. But we see that, only for  $\alpha$ ,  $\theta$  classes it's right and in the case of  $\lambda$  the values of parameters are also changing. It's verified that, these model dependency/independency are similar for both RXTE/PCA and AstroSat/LAXPC data.

### Presentation Type

Poster

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