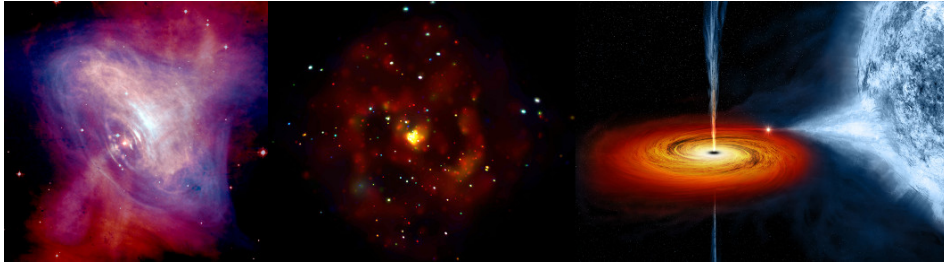


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## Studies of variability mechanism in Blazar Jets using X-ray Data

Blazars are highly variable on all timescales ranging from a few minutes to years. Variability studies in blazars is one of the important tools to understand the blazar jets. To study flux and spectral variability on intraday and long term timescales we have used XMM-Newton and SWIFT satellite X-ray data. On short-term timescales emission from jets are dominating whereas on longterm timescales the emission might have imprints of accretion disc. Flux distribution of blazars can be used to understand the variability imprint of the accretion disc onto the jet. Around the synchrotron peak, SED is curved and can be well described by log parabolic model and the corresponding spectral parameters i.e. peak energy  $E_p$ , peak luminosity  $L_p$  and the curvature  $\beta$  varies with different flux states. Correlations between these spectral parameters during different flux states could provide tight observational constraints upon the acceleration and injection processes of the emitting electrons. XMM-Newton data is used to study flux distribution of blazars and Swift-XRT data is used to study the spectral parameters derived from X-ray spectral fitting.

### Presentation Type

Poster

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