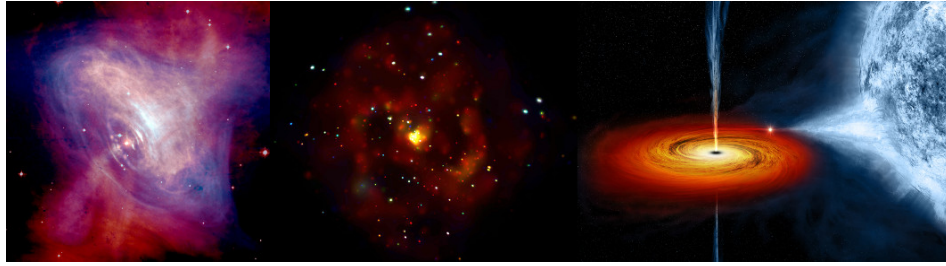


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## Coronal Properties of Low-Accreting AGNs using NuSTAR Observations

Tuesday, April 4, 2023 11:40 AM (15 minutes)

We studied the broadband X-ray spectra of Swift/BAT selected low-accreting AGNs using the observations from NuSTAR and Swift/BAT in the energy range of 3 – 150 keV. Our sample consists of 24 AGNs with Eddington ratio,  $\lambda_{Edd} < 10^{-3}$ . We extracted several coronal parameters from the spectral modelling, such as the photon index, hot electron plasma temperature, cutoff energy and optical depth. We tested whether there exists any correlation/anti-correlation among different spectral parameters. We observe that the relation of hot electron temperature with the cutoff energy in the low accretion domain is similar to what is observed in the high accretion domain. We did not observe any correlation between the Eddington ratio and the photon index. We studied the compactness-temperature diagram and found that the cooling process for extreme low accreting AGNs is complex. The jet luminosity is observed to be related with the bolometric luminosity as  $L_{jet} \propto L_{bol}^{0.6}$  which is consistent with the standard radio-X-ray correlation.

### Presentation Type

Oral

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