

X-ray UV anti-correlation in Ultra-Luminous X-ray sources

Contributed Talk //

X-ray and Gamma-Ray Binaries (XRBs)



Lutendo Nyadzani //
University of Johannesburg (UJ)

Session 1 //

Wednesday, 6 September @ 10:15 SAST

The X-ray and Ultraviolet (UV) luminosity correlation has become a focal point of interest in astrophysics, with particular attention on Ultraluminous X-ray sources (ULXs). ULXs are enigmatic astronomical sources that exhibit X-ray luminosities surpassing the Eddington limit for stellar-mass black holes. Sonbas et al. (2019) found an anti-correlation between the UV and X-ray emission from ULXs. To further explore this relationship, the present study investigates the Xray and UV luminosity correlation in ULXs using a synthetic population of binary systems generated by the COSMIC code and calculating their accretion properties.

Sponsored by the Department of Science and Innovation (DSI) and the National Research Foundation (NRF) through the South African Gamma-Ray Astronomy Programme (SA-GAMMA)

















