

Physical implications of gamma-ray emission from Cyg X-3

Tuesday 11 October 2022 14:30 (15 minutes)

Cyg X-3 is unique among accreting X-ray binaries in being a powerful source of gamma rays. Also, its gamma-ray emission, associated with major radio flares, takes place mostly in the soft spectral state. This is different from other accreting binaries, in which the radio emission is strongly quenched in the soft state. Detailed analysis of the gamma-ray, radio and X-ray emission from Cyg X-3 until early 2017 was given in Zdziarski et al. 2018, and a physical interpretation of these results in terms of magnetically driven disc outflows was given by Cao & Zdziarski 2020. Since 2017, Cyg X-3 has shown gamma-ray flaring much stronger than that observed earlier. We present an analysis of these new data, allowing us to update the physical interpretation of the emission.

Track

Binaries

Authors: ZDZIARSKI, Andrzej; MALYSHEV, Denys (Tubingen University); CHERNYAKOVA, Maria (DCU)

Presenter: ZDZIARSKI, Andrzej

Session Classification: Parallel 4