

Systematic X-ray study of GeV gamma-ray emitting radio galaxies

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Black Holes (BHs) at the center of galaxies have a $10^6 - 10^9$ solar mass and thus are called Supermassive Black hole (SMBH). When a large amount of matter accretes onto SMBH, the accreting matter shines brightly, and this phenomenon is called active galactic nuclei (AGN). Only 10% In this work, we investigate X-ray and Gamma-ray properties of GeV emitting radio galaxies listed in the 4FGL-DR2 catalog. We use X-ray data of Swift/XRT. We studied time variability, the relation between X-ray and gamma-ray photon index, together with accretion rate, and found they are classified into 3 groups; X-ray emission in the first group is dominated by the second group is dominated by disk/corona emission, and for the third group both jet and disk/corona contribute to the X-ray band.

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Collaboration

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Subcategory

Experimental Results

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