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S. Ciprini: The binary supermassive black hole conjecture for two jetted gamma-ray blazars

The study of astrophysical accretion phenomenon and binary systems is undoubtedly useful to better understand the role of gravitation in producing high-energy, X-ray and gamma-ray, emission. In particular close gravitationally bound binaries of supermassive black holes (SMBHs) in some active galactic nuclei and blazars are expected to induce cyclical modulations in the observed flux. In the past years, two jetted gamma-ray blazars have been suggested to harbour binary SMBHs: i.e., OJ 287 and PG 1553+113. I will introduce these two peculiar blazars, and present recent achievements made possible thanks to 10-year continuous monitoring observations of their GeV gamma-ray emission by the Fermi Large Area Telescope. In addition data collected thanks to dedicated observations by the Swift, Kepler and Spitzer space telescopes will be also presented.

Classification de Session: Students' presentations