

Contribution ID: 141

Type: Oral

Neutrinos from AGN coronae: the case of TXS 0506+056

Monday 7 July 2025 14:12 (12 minutes)

The blazar TXS 0506+056 was the first astrophysical source associated with a high-energy astrophysical neutrino detection. Traditionally, this production has been attributed to processes in the powerful relativistic jet, but the recent observation of neutrinos from the AGN NGC 1068 suggests a production also in the core, non-jetted region. I will discuss whether the neutrinos from TXS 0506+056 can be associated with the core region, using plasma-physics-informed scenarios for particle acceleration, and observationally informed estimates for the X-ray luminosity of the core regions. I will show that the neutrino emission from the core is too low to explain the IceCube observations, and that the blazar jet remains the preferred location for neutrino production.

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Session Classification: Student Talks