

Probing neutrino-emitting blazars by high-resolution and high-energy observations

Multimessenger studies of blazars combine electromagnetic emission from radio to gamma wavelengths, and neutrino detections up to petaelectronvolts. We demonstrate the synergy of the highest-resolution observations in the radio band and hard X-ray observations, and how they help us study sources of IceCube neutrinos. The radio VLBI technique is uniquely positioned in this space, as its resolution allows selecting beamed parsec-scale synchrotron emission, and neutrinos are likely to experience comparable beaming effects. Meanwhile, X-rays can be directly related to the neutrino production itself, and bring information about those processes. We present new insights on neutrino production in blazars, highlighting the role of electromagnetic observations in these results.

Primary author: PLAVIN, Alexander (Lebedev Physical Institute)

Presenter: PLAVIN, Alexander (Lebedev Physical Institute)

Session Classification: Wednesday afternoon session