

Search for high-energy neutrino emission from hard X-ray AGN with IceCube

Sreetama Goswami^{*1}, George C. Privon², Marcos Santander¹ for the IceCube Collaboration

WHAT THIS CONTRIBUTION IS ABOUT

- A search for high-energy neutrinos from Active Galactic Nuclei (AGN) sampled from the all-sky catalog of hard X-ray sources, *Swift*-BAT AGN Spectroscopic Survey or BASS.

RELEVANCE

- The dominant origin of the astrophysical neutrinos detected by IceCube remains unidentified but there are hints that Active Galactic Nuclei (AGN) can be a plausible emitter of the high-energy neutrinos.

STATUS

- We have performed a time-integrated stacking analysis with all the sources in our catalog which are sampled from the BASS and using two weighting schemes.

OUTLOOK

- We will test two different hypotheses by performing analyses with different sub-classes of AGN selected from the source catalog.

*Presenter email: sreetama.goswami@icecube.wisc.edu

¹ Department of physics and Astronomy, University of Alabama.

² North American ALMA Science Center, National Radio Astronomy Observatory