

## Blazars beyond the "Blob"

*Tuesday 11 October 2022 16:45 (15 minutes)*

We apply the detailed black hole magnetosphere models of Nathanail & Contopoulos to model the polarization properties and neutrino emission from blazars. We show that the polarized emission properties (evolution of PA, correlation between degree of Polarization and flux) is similar to that of pulsars, indicating a similar underlying geometry. The additional difference in blazars from pulsars is that the corresponding magnetospheres can also include protons (from the accretion disk) in magnetospheric regions of positive charge density. We show that these protons can then produce the observed neutrinos detected by Ice Cube.

### Track

Neutrinos

**Author:** KAZANAS, Demosthenes (NASA/GSFC)

**Co-author:** Dr WADIASINGH, Zorawar (CRESSR/UMD)

**Presenter:** KAZANAS, Demosthenes (NASA/GSFC)

**Session Classification:** Parallel 5