



THE 2ND
**PIETRO
BARACCHI**
CONFERENCE

Contribution ID: 10

Type: **not specified**

Jets at the extremes: the GLEAM and LAT view of blazars

Wednesday, 23 October 2019 12:20 (20 minutes)

We present the results of a cross-correlation between the latest (fourth) catalogue of gamma-ray active galactic nuclei (AGN) detected by the Large Area Telescope on board Fermi (4LAC) and the GLEAM survey carried out with the Murchison Widefield Array at two opposite extremes of the electromagnetic spectrum. The Fermi AGNs are mainly blazars; thanks to the increased sensitivity of GLEAM in comparison to the MWA commissioning survey, the vast majority of Fermi blazars now have a counterpart at low radio frequency, with a detection rate of 70% and a net count of over 1200. Gamma-ray blazars are distinguishable from the rest of GLEAM sources for a flatter spectral index, which indicates that the beamed flat-spectrum inner part of the relativistic jet still contributes also at low frequency. We use the spectral constraints from GLEAM and other radio surveys to discuss the intrinsic value of cores and lobes in radio loud AGNs.

Primary authors: GIROLETTI, Marcello (INAF - IRA); Prof. GIOVANNINI, Gabriele (INAF - IRA); Mr D'ANTONIO, Daniele (Sydney University of Technology)

Presenter: GIROLETTI, Marcello (INAF - IRA)