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Dichotomy between Gamma-Ray Detected and Non-Detected Blazars

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Deadline for manuscript submissions:
closed (1 February 2020)

Message from the Guest Editor

Dear Colleagues,

A major discovery by space- and ground-based gamma-ray telescopes is the discovery of high-energy emission from several thousands of blazars—active galaxies having their relativistic jets pointed closer to our line of sight. However, a sizable population of known blazars are still missing their gamma-ray counterpart, which leads to an unexplored dichotomy of gamma-ray detected (or gamma-ray loud) and gamma-ray non-detected (or gamma-ray quiet) blazars. Interestingly, gamma-ray detected and gamma-ray non-detected blazars have similar redshift distribution and are similar in their radio, optical, and X-ray flux distributions, with gamma-ray detected sources being slightly brighter on average in all bands. However, radio and optical polarization studies for a smaller sample of sources provide some hints in favor of the two sub-classes of objects being intrinsically different. This leads to an unexplored dichotomy of gamma-ray detected and non-detected blazars, which might provide some interesting clues about the favorable environments for the acceleration of relativistic particles to GeV/TeV energies.

Dr. Bindu Rani
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Message from the Editorial Board

Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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