

# One-HaLe model for the SED of blazars and the curious case of CGRaBS J0211+1051

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Blazars are a subclass of Active Galactic Nuclei (AGN) seen almost along the relativistic jet, which emanate from very close to the central super massive black hole. As these jets are close to our line of sight, blazars represent a unique sample to study the extreme particle energisation, nature of the magnetic field and many other physical properties of jets. Blazars are well known to show flux and spectral variations on diverse time scales.

The time dependent modeling of the spectral energy distribution (SED) and multi-frequency light curves is used to constrain many important physical parameters crucial to represent the steady state or outbursts; for example, the size and location of the emission region, particle spectra, acceleration mechanisms, magnetic field, etc. In many cases, the data collected over the years have changed our views about these enigmatic sources.

The recent data of CGRaBS J0211+1051 reveals a very interesting SED and the model constraints hint at a number of interesting facts about this particular blazar. The UV and X-ray parts of the SED do not connect smoothly suggesting hadronic contributions or contributions from another emission region. We shall be highlighting some of our recent findings from the lepto-hadronic modeling of the SED.

## Track

AGN

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