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The location of the gamma-ray emission site in blazars from radio and gamma-ray monitoring

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I will discuss our efforts to determine the location of the gamma-ray emission site in blazars with the ongoing OVRO 40 meter telescope blazar monitoring program. This program started in 2008 and is currently monitoring about 1800 blazars at 15 GHz with twice a week cadence for a sample including most of the bright blazars north of declination -20 degrees. A summary of previous findings and preliminary results on our analysis of 8 years of Fermi-LAT and OVRO light curves for the brightest sources will be presented. The emphasis will be on the characterization of the variability in the radio band, and its correlation to gamma-ray emission as observed with Fermi-LAT. The study of these correlations can provide constraints on the location of the gamma-ray emission region, but require careful consideration of the statistics that we will also discuss.

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