

Abstract for an Invited Paper
for the APR10 Meeting of
The American Physical Society

Multiwavelength observations of Fermi blazars

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Multiwavelength observations of blazars have entered a new era with the launch and successful operation of the Fermi Gamma-ray Space Telescope. With concurrent monitoring programs spanning decades of energies from radio through gamma-rays, the characteristic double-peaked spectral energy distribution (SED) of blazars can be observed evolving on timescales from days to months (and ultimately to years). The low energy peak of the SED is well understood as synchrotron emission from electrons accelerated in a relativistic jet; however, the source of the high-energy emission is as yet poorly understood with multiple models often able to fit a given single-epoch SED. With both spectral and time-variability information available for a large number of sources, physical models for gamma-ray emission can be more effectively constrained. I will discuss recent and ongoing observations of blazars with Fermi, associated multiwavelength campaigns, and theoretical implications of these observations.