Workshop on Blazar Variability across the Electromagnetic Spectrum

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Variability of Very High Energy Gamma-ray Blazars

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The third generation of Very High Energy (VHE; E>100 GeV) gamma-ray telescopes (e.g. HESS, VERITAS & MAGIC) are an order of magnitude more sensitive than their predecessors. Over the past four years observations with these instruments have increased the catalog of VHE emitters to more than 70 sources, of which 22 are extragalactic. While only limited variability is found from the 15 newly discovered VHE blazars, the more sensitive studies of the 7 previously known extragalactic VHE emitters (6 blazars & the radio-galaxy M 87) have yielded unprecedented results. Recent highlights include the discovery of minute-scale VHE flux variability, significant VHE spectral changes on sub-hour time-scales, and strong correlations of these rapid VHE variations (flux & spectrum) with those simultaneously observed at X-ray energies. A summary of the variability properties of VHE blazars will be presented.

Summary

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