

Abstract Submitted  
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**Summer 2011 VERITAS Observations of Blazar BL Lac<sup>1</sup>**

SPENCER HATCH, University of Utah, VERY ENERGETIC RADIATION IMAGING TELESCOPE ARRAY SYSTEM COLLABORATION — BL Lacertae (BL Lac) is a nearby ( $z \sim .0688$ ) active galaxy with strong optical polarization and variability, as well as a non-thermal emission spectrum. It is also the prototype of a whole class of blazars known as “BL Lac objects” which share similar polarization and variability properties. Some objects belonging to this class have been identified as very-high energy (VHE) emitters ( $E > 0.1\text{TeV}$ ), while BL Lac has remained an unconfirmed source of VHE gamma-ray emission until recently. In late May 2011, the Fermi Large Area Telescope reported observing BL Lac in a high gamma-ray state, which led to a brief multi-wavelength campaign involving several institutions, including the Very Energetic Radiation Imaging Telescope Array System (VERITAS) in southern Arizona. VERITAS observed BL Lac for a total of nine hours over the course of several weeks, from late May to early July. Standard analysis has yielded little evidence for gamma-ray emission from BL Lac, with the very notable exception of a gamma-ray outburst on the evening of June 28th. In this talk I will give some background on the growing field of gamma-ray astronomy, as well as discuss recent observations of BL Lac by VERITAS in the late 2011 observing season.

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