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A Bright TeV Flare from the Blazar B2 1215+303 Detected by VERITAS[1] JOHNATHAN KUAN, Columbia Univ, RESHMI MUKHERJEE, Barnard College, VERITAS COLLABORATION — The extragalactic TeV sky is dominated by blazars, a class of active galactic nuclei (AGN) believed to be powered by supermassive black holes, with ultra-relativistic particle jets pointed close to our line of sight. B2 1215+303 is one such blazar that was first detected at TeV energies by the MAGIC atmospheric Cherenkov telescope, and subsequently by VERITAS in observations carried out between 2009 and 2012. In February 2014, during routine observations of the blazar 1ES 1218+304, which lies in the same field of view as B2 1215+303, VERITAS detected a massive flare from B2 1215+303, which lasted for less than a day. The peak TeV gamma-ray emission was found to exceed 3 times the Crab Nebula flux in the same energy range, making B2 1215+303 one of the most luminous TeV blazars detected to date. We will present results from the VERITAS observations of this source. We examine the variability detected in B2 1215+303 and use the gamma-ray data to estimate the Doppler factor of the jet of B2 1215+303.

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