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Observation of very high-energy gamma-ray emission from Cassiopeia A with VERITAS ALEXANDER KONOPELKO, Purdue University, VERITAS COLLABORATION — We report on observations of the supernova remnant Cassiopeia A carried out with the VERITAS array of four imaging atmospheric Cherenkov telescope for about 20 hrs between September and November 2007. The standard stereoscopic analysis developed by the VERITAS collaboration reveals the excess in the direction of Cassiopeia A at the significance level of 8s. The estimated integral flux is about 3% of the Crab-Nebula flux above 1 TeV. The data are consistent with a point-like source. These observations enable measurement of a high quality spectrum of very high-energy gamma rays. The analysis results and theoretical implications will be presented at the symposium.

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