Abstract Submitted for the APR08 Meeting of The American Physical Society

Observation of very high-energy gamma-ray emission from IC443 with VERITAS VIATCHESLAV BUGAEV, Washington University, St Louis, VERITAS COLLABORATION — In 2007 the Very Energetic Radiation Imaging Telescope Array System (VERITAS) gamma-ray telescopes have been used to observe IC443, a shell-type SNR in its ISM-dominated stage of evolution that shows strong evidence of shock propagating into dense (10^5 cm^{-3}) OH clouds. We report on observations of IC443 carried out in spring 2007 (18 hours) and autumn 2007 (26 hours) with 3 and 4 VERITAS telescopes, correspondingly. The stereoscopic analysis developed by the VERITAS collaboration reveals the excess in the direction of IC443 at high significance level exceeding 6 sigma. These observations enable measurement of a spectrum of very high-energy gamma-rays. The analysis results and implications of the data on the origin of the high-energy emission will be presented.

> Viatcheslav Bugaev Washington University, St Louis

Date submitted: 10 Jan 2008

Electronic form version 1.4