

Abstract Submitted  
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**Crab Nebula Significance Map with HAWC data** GILGAMESH LUIS-RAYA, Universidad politénica de Pachuca, Pachuca, Mexico, ROBERTO ARCEO, CEFyMAP, Universidad Autónoma de Chiapas, Tuxtla Gutiérrez, Chiapas, México, EUCARIO G. PÉREZ-PÉREZ, NAZARIO BAUTISTA-ELIVAR, LUIS ALBERTO ZAMORA-CAMPOS, FRANCISCO MARROQUÍN-GUTIÉRREZ, Universidad politénica de Pachuca, Pachuca, Mexico, HAWC COLLABORATION — The all-sky observatory HAWC (The High Altitude Water Cherenkov) is a large field of view instrument which operates 24 hr/day by observing  $\sim 2$ sr of the sky. The experiment is located on Sierra Negra volcano at 4100 m above the sea level in the border between Puebla and Veracruz states in Mexico. The full array contains 300 water Cherenkov detectors with an effective area of 22,000 m<sup>2</sup> and a total number of 1200 PMTs (4 in each tank). The HAWC detector is sensitive to gamma and cosmic rays in the energy range between 100GeV and 100TeV being perfect to analyze gamma ray sources like the supernova remnant NGC1952 also known as Crab Nebula. In this work, we show significance map in the direction of the Crab nebula calculated from gamma ray data taken during 2014 with HAWC.

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