## Abstract Submitted for the APR15 Meeting of The American Physical Society

Search for Indirect Signals of Dark Matter with The High Altitude Water Cherenkov (HAWC) Observatory BRIAN BAUGHMAN, University of Maryland, College Park, PATRICK HARDING, Los Alamos National Laboratory, HAWC COLLABORATION — The High Altitude Water Cherenkov (HAWC) observatory is a wide field-of-view observatory sensitive to 100 GeV - 100 TeV gamma rays and cosmic rays. Located at an elevation of 4100 m on the Sierra Negra volcano in Mexico, HAWC observes extensive air showers from gamma rays via their production of Cherenkov light within an array of water tanks. With a wide field-of-view observing 2/3 of the sky each day and a sensitivity of greater than 1 Crab per day, HAWC has the ability to probe a large fraction of the sky for the signals of TeV-mass dark matter. HAWC's sensitivity to dark matter for several astrophysical sources and some early limits from the built detector will be presented.

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