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**Looking for the Northern Fermi Bubble with HAWC** HUGO AY-  
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HAWC COLLABORATION — The Fermi Bubbles were discovered in the GeV  
gamma-ray data from the Fermi Telescope in 2010. They extend up to  $55^\circ$  above  
and below the Galactic Center forming two large and homogeneous regions of spec-  
trally hard gamma-ray emission. Understanding the mechanisms which produce the  
observed hard spectrum will help understand the origin of the Fermi Bubbles. Both  
hadronic and leptonic models can describe the spectrum of the bubbles, though the  
leptonic model can explain similar structures observed in microwave data from the  
WMAP and Planck satellites. Recent publications show that the spectrum of the  
Fermi Bubbles is well described by a power law with an exponential cutoff between  
100MeV to 500GeV. Observing the Fermi Bubbles at higher gamma-ray energies  
will help constrain their spectrum. A steeper cutoff will favor a leptonic model. The  
High Altitude Water Cherenkov (HAWC) Observatory, located 4100m above sea  
level in Mexico, is designed to measure high-energy gamma rays between 100GeV to  
100TeV. With a large field of view and good sensitivity to spatially extended sources,  
HAWC is the ground-based observatory best suited to detect extended regions like  
the Fermi Bubbles. We present a search for emission from the Fermi Bubble visible  
to HAWC.

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