Contribution ID: **18** Type: **Oral**

Monitoring the TeV Gamma-Ray Sky with HAWC

Wednesday, December 7, 2016 2:45 PM (30 minutes)

The High Altitude Water Cherenkov (HAWC) observatory is a wide field-of-view gamma-ray detector that performs monitoring of two thirds of the sky every day at energies between 0.1 and 100 TeV.
Operating in its full configuration since March 2015, with a duty cycle of approximately 90%, HAWC has already accumulated an unprecedented data set of unbiased and evenly sampled daily TeV light curves. We will discuss how we use these results to characterize variability in various sources and focus on the study of flux states for the Blazars Markarian 421 and Markarian 501.
With HAWC, we also monitor the gamma-ray flux of selected objects in near real time with flare search algorithms running on the computing infrastructure at the HAWC site. We have started to send out alerts for HAWC flare detections and followed up on external alerts, for example neutrino triggers from IceCube. We will present the highlights of these ongoing multi-wavelength and multi-messenger monitoring efforts.

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Session Classification: Gamma-Ray Astronomy

Track Classification: HAP Workshop