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# HAWC results and future development

*Wednesday, 10 May 2017 11:00 (30 minutes)*

The High Altitude Water Cherenkov (HAWC) Observatory is an all-sky surveying instrument that covers 2/3 of the sky in 24 hours. It is located in Sierra Negra, Mexico at an elevation of 4,100 m, and was inaugurated in March 2015. In addition to providing continuous sky coverage for transient events with a >95% duty cycle, HAWC is also well suited to measure extended and large-scale structures. The array consists of 300 water Cherenkov detectors and is sensitive to extensive air showers triggered by cosmic rays and gamma rays from 100GeV to 100TeV. I will highlight HAWC's results from the past two years of operations, which include several TeV discoveries in the Galactic plane. I will also discuss HAWC's transient search for active galactic nuclei flares, gamma-ray bursts, and counterparts to gravitational waves and neutrinos. Lastly I will summarize the current effort on HAWC expansion and the development of a southern array.

**Session Classification:** Plenaries