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HAWC Contributions to the 34th International Cosmic Ray Conference (ICRC2015)

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HAWC Contributions to the 34th International Cosmic Ray Conference (ICRC2015)

Contents

- [Plenary Overview](#)
- [Operation, Calibration, and Analysis](#)
- [Galactic Gamma-Ray Physics](#)
- [Extragalactic Gamma-Ray Physics](#)
- [Cosmic-Ray Physics](#)
- [Fundamental Physics](#)
- [Upgrades](#)

Plenary Overview

Highlights from the High Altitude Water Cherenkov Observatory

John Pretz for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0866](#))

Operation, Calibration, and Analysis

HAWC: Design, Operation, Reconstruction and Analysis

Andrew J. Smith for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0397](#))

The Calibration System of the HAWC Gamma-Ray Observatory

Hugo A. Ayala Solares, Michael Gerhardt, C. Michelle Hui, Robert J. Lauer, Zhixiang Ren, Francisco Salesa Greus, and Hao Zhou for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0739](#))

Gamma Hadron Separation using Pairwise Compactness Method with HAWC

Zigfried Hampel-Arias and Stefan Westerhoff for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0829](#))

New Method for Gamma/Hadron separation in HAWC using Neural Networks

Tomás Capistrán, Ibrahim Torres, and Leopoldo Altamirano for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0692](#))

A High-Level Analysis Framework for HAWC

Patrick W. Younk, Robert J. Lauer, Giacomo Vianello, J. Patrick Harding, Hugo A. Ayala Solares, Hao Zhou, and C. Michelle Hui for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0238](#))

Galactic Gamma-Ray Physics

TeV Gamma-Ray Emission Observed from Geminga with HAWC

Brian M. Baughman and Joshua Wood for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0247](#))

Fermi Bubbles with HAWC

Hugo A. Ayala Solares, C. Michelle Hui, and Petra Hütemeyer for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0379](#))

HAWC Observation of Supernova Remnants and Pulsar Wind Nebulae

C. Michelle Hui and Hao Zhou for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0323](#))

TeV Observations of the Galactic Plane with HAWC and Joint Analysis of GeV Data from Fermi

Hao Zhou, C. Michelle Hui, and Petra Hütemeyer for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0737](#))

Observations of the Crab Nebula with Early HAWC Data

Francisco Salesa Greus for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0348](#))

Looking for Gamma-ray Emission from TeV Binary Candidates with HAWC

Segev BenZvi for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0217](#))

Searching for Very High Energy Emission from Pulsars Using the High Altitude Water Cherenkov (HAWC) Observatory

César Alvarez Ochoa, Pablo Saz Parkinson, Andrea Belfiore, Alberto Carramiñana, Colas Rivière, and Eduardo Moreno for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-1022](#))

Extragalactic Gamma-Ray Physics

Results from monitoring TeV blazars with HAWC

Robert J. Lauer and Patrick W. Younk for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0239](#))

Blazar Alerts with the HAWC Online Flare Monitor

Thomas Weisgarber and Ian G. Wisher for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0732](#))

First Results from HAWC on GRBs

Dirk Lennarz and Ignacio Taboada for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0237](#))

Selection of AGN to study the extragalactic background light with HAWC

Sara Coutiño de León, Alberto Carramiñana, and Daniel Rosa-González for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0035](#))

Limit on an Isotropic Diffuse Gamma-Ray Population with HAWC

John Pretz for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0867](#))

All-sky sensitivity of HAWC to Gamma-Ray Bursts

Joshua Wood for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0672](#))

Cosmic-Ray Physics

The Galactic Cosmic-Ray Sun Shadow observed by HAWC

Olivia Enríquez and Alejandro Lara for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0716](#))

Solar Event Simulations in the HAWC Scaler System

Olivia Enríquez, Alejandro Lara, and Rogelio Caballero-Lopez for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0722](#))

Observation of Anisotropy in the Arrival Direction Distribution of TeV Cosmic Rays with HAWC

Segev BenZvi, Daniel Fiorino, and Stefan Westerhoff for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-1224](#))

Towards a Measurement of the $e+e-$ Flux Above 1 TeV with HAWC

Segev BenZvi, Daniel Fiorino, Zigfried Hampel-Arias, and Mehr Un Nisa for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0216](#))

Full-Sky Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC

The HAWC Collaboration, The IceCube Collaboration
(proceeding [HAWC-ICRC-2015-0997](#))

Fundamental Physics

Dark Matter Annihilation and Decay Searches with the High Altitude Water Cherenkov (HAWC) Observatory

J. Patrick Harding and Brenda Dingus for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-1296](#))

First Limits on the Dark Matter Cross-Section with the HAWC Observatory

Megan Longo Proper, Brenda Dingus, and J. Patrick Harding for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0402](#))

Sensitivity of HAWC to Primordial Black Hole Bursts

Tilan N. Ukwatta, James T. Linnemann, Daniel Stump, Jane H. MacGibbon, Samuel S. Marinelli, Tolga Yapici, and Kirsten Tollefson for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0710](#))

The potential of the HAWC Observatory to observe violations of Lorentz Invariance

Lukas Nellen for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-1056](#))

Upgrades

Detector Considerations for a HAWC Southern Observatory

Michael DuVernois for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0418](#))

HAWC Upgrade with a Sparse Outrigger Array

Andres Sandoval for the HAWC Collaboration
(proceeding [HAWC-ICRC-2015-0529](#))