

Workshop on Machine Learning for Analysis of High-Energy Cosmic Particles



UNIVERSITY OF DELAWARE
BARTOL RESEARCH
INSTITUTE

Contribution ID: 34

Type: **Talk**

The Radar Echo Telescope for Cosmic rays

Wednesday, 29 January 2025 15:10 (20 minutes)

The Radar Echo Telescope for Cosmic Rays (RET-CR) was deployed this year at the high-altitude Summit Station in Greenland. Its primary goal is to detect in-ice continuations of high-energy cosmic-ray-induced air showers using the radar echo method. Successfully detecting in-ice cosmic-ray signals through this technique would provide significant insights and serve as a foundation for the establishment of the Radar Echo Telescope for Neutrinos (RET-N).

This talk will focus on the radar echo technique, analysis of RET-CR surface station data for reconstruction of key parameters, including primary energy, arrival direction, and core positions. It would also involve studying the combined askaryan and radar signals.

Type of Contribution

poster / flash talk (for work in progress)

Primary authors: GOPINATH, Krishna Nivedita (Radboud University); MULREY, Katie (University of Delaware)

Presenter: GOPINATH, Krishna Nivedita (Radboud University)

Session Classification: Talks