

Simulation Study of the Radio Emission at IceTop

IceCube Collaboration
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What is this contribution about:

• Development of the simulation chain for analyzing radio emission at the IceCube Neutrino Observatory

What has been done:

- Development of a novel filter to remove RFI peaks and boost CR detection using the local background spectra
- Calculation of the reconstruction efficiency for the 1km² array
- Comparison between observed and simulated waveforms

Results:

- We will observe air showers beginning at about 30 PeV
- We have detected the first air showers and they have good qualitative agreement with CoREAS simulations



