

# In-Ice Phased Antenna Arrays for Radiodetection of Energetic Neutrinos

*Friday, June 1, 2018 6:30 PM (1 hour)*

Experiments such as the Askaryan Radio Array (ARA) use in-ice antennas to detect the Askaryan radio emission produced by interactions of ultra-high-energy neutrinos in glacial ice. A prototype phased array trigger was recently deployed with an ARA station this austral summer (December 2017–January 2018). The phased array trigger forms beams from multiple antennas in real time to reduce the electric field required to trigger the detector. This poster will report on the design, operation, and physics potential of the prototype.

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## **Collaboration name**

Askaryan Radio Array

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