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## **GNO - Greenland Neutrino Observatory**

Thursday, 12 June 2014 09:00 (30 minutes)

The goal of the proposed Greenland Neutrino Observatory (GNO) is to discover and study ultra-high energy neutrinos by looking for radio emission from particle cascades induced by these neutrinos in the Greenland ice sheet. GNO will consist of an array of radio antenna stations deployed near Summit Station in central Greenland, sitting atop a 3 km deep ice sheet. Preliminary analysis of field measurements indicate a radio attenuation length of approximately 1000 m at 300 MHz in the upper 1.5 km of ice. We are currently investigating the logistics of operating at Summit Station, assembling a prototype station to be deployed in spring/summer 2015, and developing simulation tools to optimize the design and configuration of the future array of antenna stations.

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