

Abstract Submitted
for the APR21 Meeting of
The American Physical Society

The Radio Neutrino Observatory in Greenland (RNO-G)¹

DANIEL SMITH, University of Chicago, RNO-G COLLABORATION — The Radio Neutrino Observatory in Greenland (RNO-G) is designed to make the first observations of ultra-high energy neutrinos at energies above 30 PeV via the detection of Askaryan radiation and serve as a technology development site for future experiments. RNO-G will play a unique role in multi-messenger astrophysics as the world's largest in-ice Askaryan radio detection array and the first in the Northern Hemisphere. The experiment will be composed of 35 autonomous stations deployed over a 5 x 6 km grid near to NSF's Summit Station in Greenland. Each station consists of an electronics chain optimized for low power, deep and surface antennas, a digital phased array trigger, a solar power system allowing for a live time of ~70%, and communication systems. I present an overview of the science goals, current status of construction and plans for the first season of deployment in Summer 2021.

¹Belgian Funds for Scientific Research (FRS-FNRS and FWO) and FWO programme for International Research Infrastructure (IRI)

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Date submitted: 08 Jan 2021

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