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The Radio Neutrino Observatory in Greenland STEPHANIE WISSEL, Pennsylvania State University, RNO-G COLLABORATION — The astrophysical neutrino flux measured by IceCube has demonstrated the important role neutrinos play in multi-messenger astrophysics, but a larger exposure enabled through new technology is needed to expand the reach of neutrino telescopes to higher energies. Planned for the NSF-run Summit Station in Greenland, the Radio Neutrino Observatory in Greenland (RNO-G) consists of 35 autonomous stations that will comprise the first neutrino telescope with access to the Northern sky at energies greater than 100 PeV. Each station includes a deep component deployed with a phased array trigger and a surface component for event characterization and cosmic ray identification. In addition to discussing the unique role RNO-G will play in multi-messenger observations, we will present the instrument design and deployment timeline, including the plans for the first several stations to be deployed in the summer of 2020.

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