

**XVIII Workshop on Neutrino Telescopes
Palazzo Franchetti – Istituto Veneto
Venice, 18-22 March 2019**

**Poster Session
Submission of Abstract**

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Title of the Poster: The Radio Neutrino Observatory - the next generation radio neutrino detector at the South Pole

Abstract Text: (no longer than 800 characters)

The Radio Neutrino Observatory (RNO) is the mid-scale discovery instrument designed to make the first observation of neutrinos from the cosmos at extreme energies, well beyond current instrument capabilities. A broad international collaboration with extensive collective experience in both the radio and optical neutrino detection techniques has coalesced around a design for RNO that combines the strengths of several currently implemented detector designs in the field to produce an optimal design for the discovery of the highest energy neutrinos.

This new observatory will be the largest ground-based neutrino telescope to date, enabling the discovery of ultra-high-energy neutrinos, determining the nature of the astrophysical neutrino flux that has been measured by IceCube at high energies, extending the reach of multi-messenger astrophysics to the highest energies, and enabling investigations of fundamental physics at energies unreachable by particle accelerators on Earth.

We will present the proposed RNO design for South Pole and elaborate on its capabilities.

Summary: (no longer than 400 characters. Insert a tag, key word, topic, etc.)

Kindly follow the instructions above and send the abstract (.pdf file) to <mailto:salente@pd.infn.it> by February 22nd 2019. Response will be sent to the submitter's e-mail address indicated above, by March 1st.

Posters will be exhibited all week long at the workshop site. Discussion will take place on Thursday March 21st, during the Poster Party. At least one author must be available for "question-answer" time.

Best 3 posters will be awarded on Friday 22nd, during the closing plenary session of the workshop.