

# LNGS SEMINAR SERIES

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## **Searches for extraterrestrial neutrino sources with IceCube**

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IceCube, the world's largest neutrino telescope, instruments a cubic kilometer of the Antarctic ice with light sensors to detect high-energy neutrinos. Such neutrinos may be produced when high-energy cosmic rays interact with matter or radiation in or near their sources. Events including charged-current interactions of muon neutrinos are particularly well-suited to search for extraterrestrial neutrino sources because of the high pointing accuracy provided by this signature. I will present the results of searches for neutrino sources in the muon neutrino channel, and the future prospects of these searches.

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