## PASCOS 2016: 22nd International Symposium on Particles, Strings and Cosmology



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## Astrophysics and particle physics With IceCube and beyond

Thursday, 14 July 2016 11:30 (30 minutes)

The IceCube Neutrino Observatory, the world's largest neutrino detector, has been fully operational at the Amundsen-Scott South Pole Station since 2011. IceCube has discovered a flux of high energy neutrinos of extraterrestrial origin, and the latest results on the characterization of this flux and investigations into its origin(s) will be presented. In addition, IceCube is sensitive to a wide range of topics in particle physics. Current results from searches for dark matter, measurements of neutrino oscillations, and searches for sterile neutrinos will be shown, and future plans for the IceCube-Gen2 observatory and PINGU neutrino physics array will be discussed.

## **Summary**

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