

# Latest Results from the IceCube Neutrino Observatory

*Friday 17 June 2022 09:15 (15 minutes)*

The IceCube Neutrino Observatory, built into a cubic kilometer of ice at the South Pole, was completed in 2010 and has been in continuous operation since then. Discovering the diffuse astrophysical neutrino flux in 2013, and pinpointing the first high-energy neutrino sources starting in 2018, IceCube has inaugurated the era of neutrino astronomy. Progress has been not only incremental but occasionally revolutionary, a result of large advances in computing that could not have been foreseen when the detector was built. Such advances include the detailed modeling of photon propagation in the glacial ice, and the application of Deep Learning to event selection and reconstruction. In this talk, I will review some of the latest results from IceCube, with an eye toward where such innovations have had a large impact.

**Author:** FINLEY, Chad (Stockholm University / OKC)

**Presenter:** FINLEY, Chad (Stockholm University / OKC)

**Session Classification:** Sektionen för elementarpartikel och astropartikelfysik

**Track Classification:** Parallel session: partikelsektionen