

Executive Summary

- Title: Performance of the D-Egg Optical Sensor for the IceCube Upgrade
- The IceCube Upgrade will deploy around 300 new optical sensors called D-Eggs to expand both physics and calibration strategies. Laboratory-based acceptance testing of D-Eggs is now on-going.
- Long-term operation of D-Eggs requires thoroughly testing hardware reliability and detector performance, before permanent deployment in the Antarctic ice.
- The first 16 of roughly 300 D-Eggs were tested at -40°C and measurement results relevant to in-ice operations are presented.
- D-Egg measurement results indicate stable operations and are within acceptance testing expectations.

37th International Cosmic Ray Conference (ICRC 2021)

July 12th – 23rd, 2021

Online – Berlin, Germany