

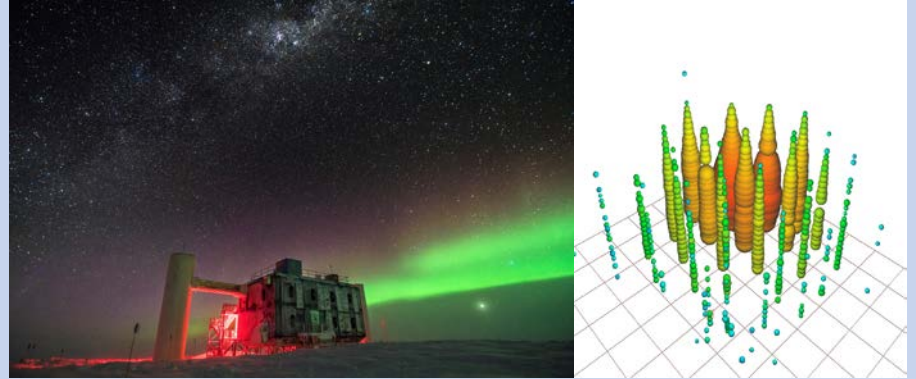
Creighton University Physics Department presents:

Catching Neutrinos with Ice at the End of the World

Presented By
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Research Scientist,
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Abstract:

Neutrinos are weakly interacting particles, making them uniquely difficult to detect and at the same time surprisingly useful probes of fundamental physics at the largest and smallest scales. To detect astrophysical neutrinos, the IceCube Neutrino Observatory transforms a cubic-kilometer of ice at the South Pole into a weak-force telescope. Since its completion a decade ago, IceCube has discovered the existence of high-energy astrophysical neutrinos, found the first evidence of the Glashow resonance, probed neutrino interactions at the highest energy scales and is beginning to unveil individual sources of neutrinos from outer space. In this talk, I will highlight these results, discuss the technical challenges involved, and provide an outlook for the future with IceCube-Gen2.

Tuesday, November 16, 12:30 pm

Hixson-Lied Science Building, Room 188

light refreshments will be provided
for more information email jackgabel@creighton.edu