

The Reverend George V. Coyne, S. J. Lecture in Astronomy and Astrophysics

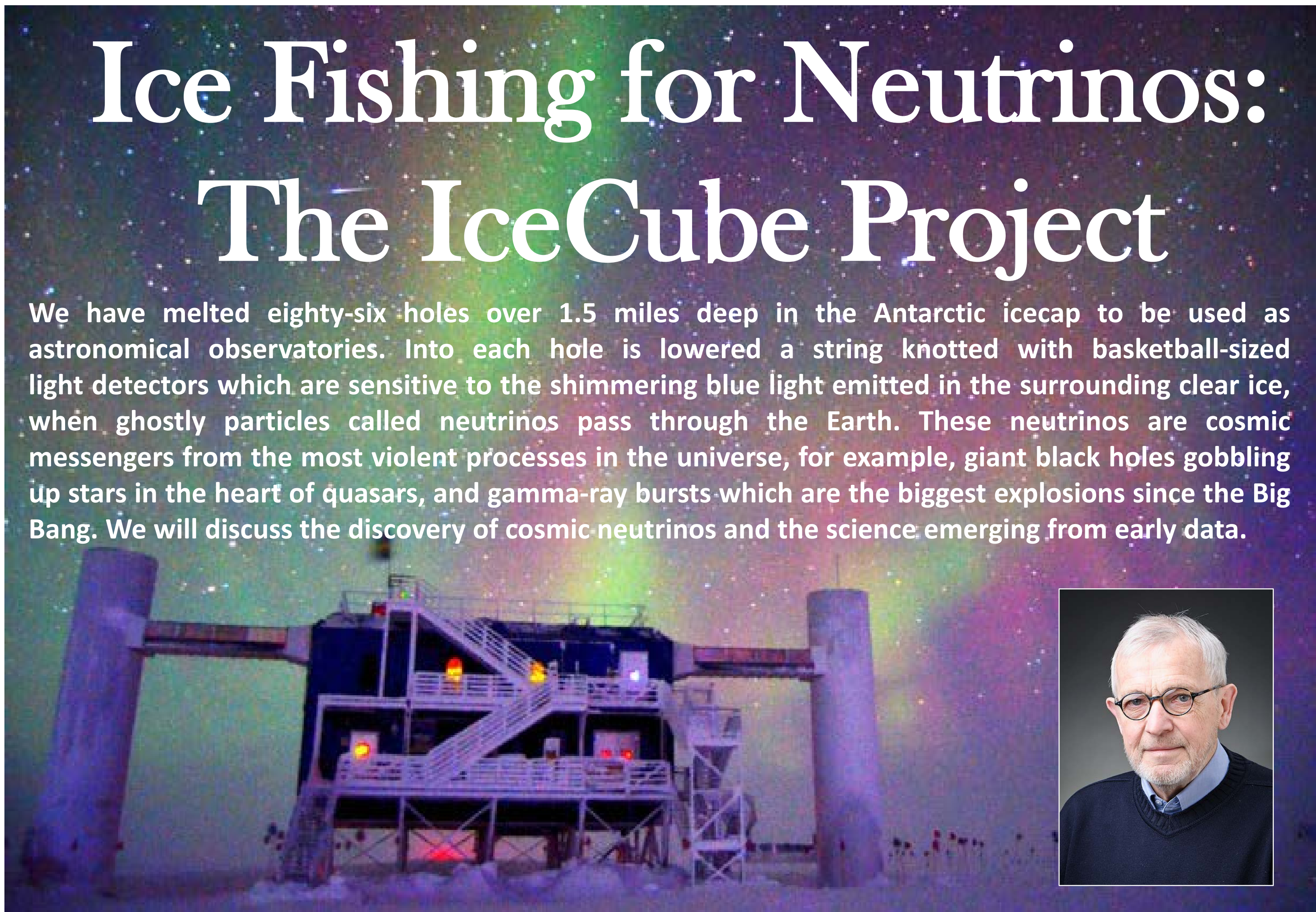
will be presented by

Dr. Francis Halzen

*University of Wisconsin-Madison;
Principal Investigator for IceCube*

Ice Fishing for Neutrinos: The IceCube Project

We have melted eighty-six holes over 1.5 miles deep in the Antarctic icecap to be used as astronomical observatories. Into each hole is lowered a string knotted with basketball-sized light detectors which are sensitive to the shimmering blue light emitted in the surrounding clear ice, when ghostly particles called neutrinos pass through the Earth. These neutrinos are cosmic messengers from the most violent processes in the universe, for example, giant black holes gobbling up stars in the heart of quasars, and gamma-ray bursts which are the biggest explosions since the Big Bang. We will discuss the discovery of cosmic neutrinos and the science emerging from early data.



Thursday, October 1, 2015

4:00PM

**Weasler Auditorium
Marquette University**