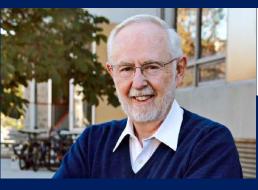




## PUBLIC LECTURE

## by Nobel Laureate Professor Emeritus Art McDonald, SNOLab

## How to Know a Neutrino from a Hole in the Ground!





*This event is free and open to public. Registration link:* 



Inquires: maricic@hawai.edu



Date: Friday, April 25, 2025 Time: 4:30 – 5:30 pm + Q&A Location: Bilger Hall 152 University of Hawaii

To understand what's above, some particle physicists are seeking answers below the Earth. Nobel Laureate and Queen's Professor Emeritus Arthur McDonald will lecture on the topic of how researchers are uncovering the nature of the Universe and neutrinos from underground laboratories including SNOLAB in Sudbury, Canada.

Dr. McDonald received the 2015 Nobel Prize in Physics and shared in the 2016 Breakthrough Prize in Fundamental Physics for a discovery that redefined the basic laws of particle physics: neutrinos have mass.

In order to observe and study these tiny subatomic particles, Dr. McDonald and his team operated the Sudbury Neutrino Observatory (SNO) experiment in an active nickel mine. Later becoming SNOLAB, the facility at 2 km underground is the lowest radioactivity laboratory in the world. Dr. McDonald will illustrate how underground laboratories are continuing to help solve some of the universe's this unique location is continuing to help solve some of the universe's biggest mysteries, such as dark matter, the elusive building block of the universe that makes up almost 85 % of its matter.