CARDT, AECL, CNS and WiN Joint Speaker Session

Dr. Tony Noble - Professor, Canada Research Chair, Scientific Director of the McDonald Institute, Queen's University

"Shedding Light on Dark Matter, Neutrinos, and the missing mass in the Universe"

CNL is proud to offer under the Advanced Radiation Detection Techniques (CARDT) course, a seminar entitled "Shedding Light on Dark Matter, Neutrinos, and the missing mass in the Universe" in partnership with the Canadian Nuclear Society, Women in Nuclear (WiN) Eastern Ontario, and Atomic Energy of Canada Ltd (AECL).

Summary

At the largest of scales, scientists have an exquisite understanding of how structures in the Universe were formed and how they will evolve. At the smallest of scales, the enormously successful standard model of particle physics describes how the most fundamental building blocks of nature interact and form matter. Despite these successes, there are great mysteries still to be solved, considered the highest priority research questions in physics today. These include the mysterious "dark matter," which appears to dominate the Universe, but we have no idea what it is. Likewise, the enigmatic neutrinos continue to surprise us with their peculiar properties, and they may help us understand why all the antimatter in the universe appears to have gone missing. In this talk, I will talk about how astroparticle physicists are trying to solve these most difficult problems by using a facility that is 2 kilometres underground.

Speaker

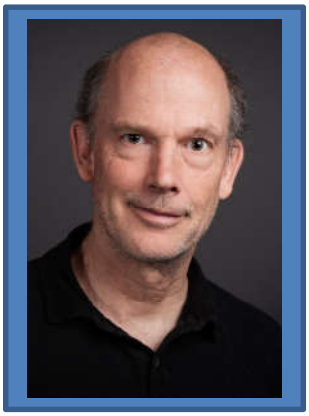
Dr. Tony Noble is a Professor, Canada Research Chair, and the Scientific Director of the McDonald Institute at Queen's University.

Where: Mackenzie Community School (Childs Auditorium)

When: **Thursday, November 17th**
6:30 - 7:00 pm, Refreshments
7:00 - 8:00 pm, Talk

Who: **Dr. Tony Noble**
Queen's University

Price: Free, Open to the Public



A CNS membership is not required to attend this seminar; all are welcome.
For more information, please contact Andrew Morreale (andrew.morreale@cnl.ca).
For more information on CARDT please visit https://www.cnl.ca/cnl-advanced-radiation-detection-techniques-cardt-course/