



DEPARTMENT OF
PHYSICS & ASTRONOMY
SPEAKER SERIES

PRAIRIE UNIVERSITIES PHYSICS SEMINAR SERIES

*Decays of rare isotopes:
From the precision frontier
to the limits of stability*

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University of Regina



Thurs, March 28
1:40-2:55PM
D632

Everyone welcome!

Studies of atomic nuclei at the limits of stability often reveal surprising phenomena such as exotic structures and rare modes of radioactive decay. Experimentally, studies of the most exotic nuclei pose significant challenges that require powerful rare-isotope production and accelerator facilities combined with high-luminosity detection systems and state-of-the-art techniques.

In this presentation, I will focus primarily on recent results and future plans related to studying decays of rare isotopes. High-precision beta counting and coincident gamma ray

and proton spectroscopy techniques as well as an introduction to a novel detection system called the “active target and time projection chamber” will be presented using examples of experiments recently performed and planned at TRIUMF in Canada, NSCL in the USA and GANIL in France.

University of
Lethbridge

