



LBNL Nuclear Physics Forum

Thursday, February 22, 2018 @ 11:00 am

Building 88 Lounge (2nd floor)

Cookies and coffee available from 10:45am

Prof. Geoff F. Grinyer

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

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.



Nuclear Science Division