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## Superallowed Beta Decays

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### **Superallowed Fermi $\beta$ Decay: The precision frontier of nuclear physics**

**Dr. Gwen Grinyer (she/her)** Department of Physics, University of Regina, Regina, SK S4S 0A2, Canada

High precision measurements of the  $ft$  values for superallowed Fermi  $\beta$  decays provide fundamental data with which to constrain the conserved vector current (CVC) hypothesis, set limits on the Standard Model description of electroweak interactions, and test unitarity of the Cabibbo-Kobayashi-Maskawa (CKM) quark mixing matrix. In this lecture, I will present the status of the world data on the superallowed Fermi  $\beta$  emitters and explain how we go from state-of-the-art measurements in the lab to extracting fundamental physics at the precision frontier.

*Virtual*

**Presenter:** Prof. GRINYER, Gwen