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Superallowed Beta Decays

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Superallowed Fermi β Decay: The precision frontier of nuclear physics

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High precision measurements of the *ft* values for superallowed Fermi β 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 β 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