

Abstract Submitted
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Project 8 - Energy Spectrum Reconstruction Using Cyclotron Radiation Emission Spectroscopy LUIS SALDANA, Yale University, PROJECT 8 COLLABORATION — Project 8 is developing Cyclotron Radiation Emission Spectroscopy (CRES) on the beta-decay spectrum of tritium for the measurement of the absolute neutrino mass scale. CRES is a frequency-based technique that aims to probe the endpoint in the tritium energy spectrum with a target sensitivity of 0.04 eV. Current studies are performed on monoenergetic electrons emitted by a gaseous ^{83m}Kr calibration source. We discuss the path from frequency measurements into an energy spectrum alongside the analysis and simulation of Project 8 data. We also discuss some of the challenges present in our event reconstructions and the techniques developed to address them.

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