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Overview of the Project 8 Experiment[1] BRENT VANDEVENDER, Pacific Northwest National Laboratory, PROJECT 8 COLLABORATION — We present an overview of the Project 8 experiment, a concept for the next-generation direct neutrino mass measurement after KATRIN, with a sensitivity goal to cover the range of neutrino masses allowed by the inverted mass hierarchy. Project 8 is a tritium endpoint experiment based on Cyclotron Radiation Emission Spectroscopy (CRES) of beta decay electrons from an *atomic* tritium source. We demonstrate how this combination can offer advantages in both statistical and systematic uncertainties compared to existing technologies. We then present our staged approach to develop the technology for the final experiment, including a discussion of the demanding specifications for an atomic tritium source.

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