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Project 8: Exploring a novel technique for the measurement of neutrino mass LISA MCBRIDE, University of Washington, PROJECT 8 COLLABORATION — Project 8 is a neutrino mass measurement experiment. It uses radio frequency techniques to observe the cyclotron radiation from beta-decay electrons trapped in a magnetic bottle. From the electrons' cyclotron frequencies, the beta-decay energy spectrum, and thus the mass of the electron neutrino may be observed. This nondestructive energy measurement technique may provide improved sensitivity to the neutrino mass over previous experiments. Currently, Project 8 is seeking to demonstrate an energy measurement made on single electrons. Recent progress and prototype status will be discussed.

Lisa McBride University of Washington

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