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Towards an improved neutrino mass measurement: a KATRIN status report¹ LARISA THORNE, Carnegie Mellon Univ, KATRIN COLLABO-RATION — The Karlsruhe Tritium Neutrino (KATRIN) experiment aims to make a precision mass measurement of the neutrino by leveraging the kinematics of tritium beta decay, to a design mass sensitivity of 0.2 eV (90% C.L.). Currently in the late commissioning stages, KATRIN has seen first transmission of electrons through its complete 70m beamline, characterized backgrounds and subsystems via extensive analysis of commissioning data, and run calibration tests with multiple krypton sources. A summary of results will be given here, as well as an outlook to both the immediate and extended future.

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