

Abstract Submitted
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Progress on a demonstrator for the atomic tritium phase of Project 8¹ ERIC MACHADO, University of Washington, PROJECT 8 COLLABORATION — The current phase of the Project 8 neutrino mass experiment seeks to utilize Cyclotron Radiation Emission Spectroscopy (CRES) to obtain high-resolution measurements of electron energies from molecular tritium beta decays, with the final phase of the experiment aiming to be sensitive to the full range of masses allowed by the inverted hierarchy. To that end, a future goal of the experiment is to use the CRES technique to measure the spectrum produced by magnetically-trapped source of gaseous atomic tritium, a measurement which avoids a major systematic contribution to the endpoint of the tritium energy spectrum caused by the molecular final state distribution. Progress is presented on an atomic hydrogen-based demonstrator of atom production, cooling, and magnetic-trapping techniques.

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