

Abstract Submitted
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The Tritium-Recoil Ion Mass Spectrometer: examining molecular effects in neutrino mass experiments¹ LAURA BODINE, DIANA PARNO, R.G. HAMISH ROBERTSON, University of Washington — Detailed molecular final state calculations are required for the next generation of tritium-based neutrino mass experiments. The calculations also predict the branching ratio to the bound molecular ion ${}^3\text{HeT}^+$, which is directly measurable. The Tritium Recoil-Ion Mass Spectrometer is a time-of-flight spectrometer designed to measure molecular dissociation in tritium beta decay as a test of the calculations used in neutrino-mass analyses. We report on the status and outlook of the experiment.

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