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Updated measurement of the permanent electric dipole moment (EDM) of ¹⁹⁹Hg¹ BRENT GRANER, YI CHEN, ERIC LINDAHL, BLAYNE HECKEL, University of Washington — A permanent electric dipole moment (EDM) in an atom or particle would prove that time reversal symmetry is broken. In addition, an atomic EDM may provide evidence of new physics or CP symmetry violation in the strong sector. We have recently completed an improved measurement of the EDM of ¹⁹⁹Hg utilizing a set of vapor cells containing isotopically-enriched ¹⁹⁹Hg optically pumped and probed with UV laser light. I will discuss the most recent iteration of the experiment, and present unblinded results.

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