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Test of the Equivalence Principle using Multiple Materials TODD WAGNER, JENS GUNDLACH, STEPHAN SCHLAMMINGER, University of Washington — We present new results for a lab test of the equivalence principle. Our experiment uses a torsion pendulum with different composition test bodies arranged in a composition dipole and is mounted on a turntable that rotates with constant angular velocity. We present a combined analysis for Be-Ti and Be-Al composition dipoles, allowing us to constrain equivalence principle violations for charges based upon a linear combination of baryon number and lepton number. Additionally, we present preliminary results for test bodies that mimic the earth's and moon's compositions.

Todd Wagner
University of Washington

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