

Abstract Submitted  
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**Progress on a new sub-millimeter test of the gravitational inverse square law**<sup>1</sup> CHARLES HAGEDORN, MATTHEW TURNER, STEPHAN SCHLAMMINGER, SCOTT POLLACK, JENS GUNDLACH, University of Washington — Tests of the gravitational inverse square law place stringent limits on new physics. Work is underway on a new test of Newton's inverse square law at distances less than 100 microns. We utilize a torsion balance in electrostatic feedback with a parallel plate mass configuration. Construction of our apparatus is largely complete - we will share highlights from the experiment's ongoing commissioning effort.

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