

Abstract Submitted  
for the APR16 Meeting of  
The American Physical Society

**Development of a Torsion Balance Experiment to Investigate Gravitation at the Sub-Millimeter Range** ADAM ARCHIBALD, MIKE ABERCROMBIE, TSITSI NOUSINOV, KASEY WAGONER, RAMANATH COWSIK, Washington University in Saint Louis — This poster covers our efforts to investigate possible violations of the inverse-square law of gravity at ranges below 1 cm. An instrument of novel design, sensitive to such violations, has been constructed and being operated in the basement of Rudolph Hall, Washington University in Saint Louis. We discuss the main design features and calibration of the instrument to assess its sensitivity. We provide the first results from our study of possible violations for a range of several millimeters. We conclude with a discussion of prospects for the future.

Adam Archibald  
Washington University in Saint Louis

Date submitted: 19 Feb 2016

Electronic form version 1.4