

DAMOP05-2005-020010

Abstract for an Invited Paper  
for the DAMOP05 Meeting of  
the American Physical Society

### **Laboratory Tests of Newtonian Gravity**

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Torsion balances provide a table-top experimental tool to test the equivalence principle and inverse square law of gravity, properties of gravity that have recently been called into question. Modern theories of quantum gravity predict new spatial dimensions that may lead to an observable violation of the inverse square law and new scalar interactions that violate both the equivalence principle and inverse square law. The dark energy that pervades the universe may lead to similar violations of these laws. Our group at the University of Washington has developed torsion balances to test these laws. We have experimental results that set new limits on the violation of the equivalence principle at length scales larger than one meter and that probe the inverse square law at distances as small as 50 microns. The latest results from our group will be presented.