



EINLADUNG

zum

VERA - SEMINAR

von

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### **A micromechanical proof-of-principle experiment for measuring the gravitational force of milligram masses**

In this talk we address a simple question: how small can one make a gravitational source mass and still detect its gravitational coupling to a nearby test mass? We describe an experimental scheme based on micromechanical sensing that should allow to observe gravity between milligram-scale source masses, thereby improving the current smallest source mass values by three orders of magnitude and possibly even more. We also discuss the implications of such measurements both for improved precision measurements of Newton's constant and for a new generation of experiments at the interface between quantum physics and gravity.

**Donnerstag, 21.04.2016, 16:30 Uhr**

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",  
1. Stock, Victor-Franz-Hess-Hörsaal**