

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Clifford Will

Washington University in St. Louis

The Confrontation between General Relativity and Experiment

We review the experimental evidence for Einstein's general relativity. Tests of the Einstein Equivalence Principle support the postulates of curved spacetime, while solar-system experiments strongly confirm weak-field general relativity. We describe the status of the recently concluded Gravity Probe B experiment, and of observations of binary pulsar systems. Future tests of the theory in the radiative and strong-field regimes may be possible using gravitational-wave observatories on Earth and in space, and using observations of stars orbiting the central black hole in our galaxy.

Wednesday, 9th July 08, 11:15 h, Room 348 / 349, Theresienstr. 37 / III

Prof. V. Mukhanov