

SEMINAR NOTICE

*Department of Physics and Engineering Physics
University of Saskatchewan*

SPEAKER: Clifford M. Will
McDonnell Center for the Space Sciences,
Department of Physics, Washington University,
St. Louis, USA

TOPIC: *The Confrontation Between General Relativity and
Experiment: A Centenary Perspective.*

DATE: Wednesday, November 16, 2005

TIME: 2:00 – 3:00 p.m.

PLACE: Room 165, Physics Building

ABSTRACT:

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. The Binary Pulsar provides tests of gravitational-wave damping and of strong-field general relativity. We describe ongoing and future experiments, such as the recently completed Stanford Gyroscope Experiment, a satellite test of the Equivalence principle, and tests of gravity at short distance to look for extra spatial dimensions. Recently operational laser interferometric gravitational-wave observatories, and a future space interferometer, may provide new tests via the properties of gravitational waves.

Coffee and Cookies will be served in the faculty/staff lounge from 3:00 – 3:30 p.m. for those attending the seminar.