Physics Colloquium

"45 Years of Lunar Laser Ranging versus a New 3-Body Pulsar System"

Professor Emeritus Ken Nordtvedt Department of Physics Montana State University

> Friday, January 31, 2014 4:10 – 5:00 pm, 108 EPS

Abstract: For 45 years Lunar Laser Ranging (LLR) observers and analysts have steadily improved a variety of tests of General Relativity, with perhaps the most significant query being whether the Newtonian-like accelerations of Earth and Moon toward the Sun are equal. Was Galileo right? A recently discovered 3-body pulsar system PSRJ0337+1715 --- pulsar and two white dwarf companions --- may provide an analogous test of how gravity pulls on gravity, but with two or three orders of magnitude higher precision than LLR's achievement.

Host: Jiong Qiu Refreshments 3:45 p.m. EPS 2nd Floor Atrium

