



**Friday,
February 19, 2016
7:00 p.m.**

Big 12 Room
Kansas Union
1301 Jayhawk Blvd.
Lawrence, KS 66045



Gravitational Waves

Prof. Hume A. Feldman

*Department of Physics and Astronomy
University of Kansas*

On February 11, 2016, the Advanced LIGO (Laser Interferometer Gravitational-wave Observatory) collaboration announced that they detected gravitational waves from two coalescing black holes. This discovery confirms predictions from Einstein's Theory of General Relativity, published one hundred years ago. In addition, this observation opens up a brand new window into the Universe. The LIGO detection is the first step to observe the Universe in gravitational waves, a completely different radiation that will inform us of events that were so far, hidden from view.

About Professor Hume Feldman:

Hume Feldman is a professor and the department chair of Physics and Astronomy at the University of Kansas. He studies the large-scale structure of the universe, developing and implementing dynamical and statistical tools. In particular, he analyzes proper distance surveys to find the distribution of mass in the Universe. He looks at the kinetic Sunayev-Zeldovich signature of clusters to study dark energy and the evolution of the Hubble parameter and the distribution, properties and substructure of void-supercluster network. Feldman also investigates the effects of neutrino mass on the power spectrum of mass fluctuation in the linear and non-linear regimes.

Department of Physics and Astronomy Public Event

For more information: <http://physics.ku.edu> 785-864-4626 physics@ku.edu