## ROBERT A. WOODRUFF

B.S. in Physics, 1964 from Kansas State University

## An Inquiring Mind in Search of Phun from Fysics

Town Hall Leadership Studies Building

> October 15, 2012 4:30 p.m.

Refreshments at 4 p.m. Room 112, Leadership Studies

As someone who was inspired to become a physicist by a first year teacher in high school, Bob Woodruff will discuss his ensuing career in designing space optical systems. He will describe in some detail two examples of opportunities a physics education presented him: "fixing" the Hubble Space Telescope spherical aberration problem and the optical design for Kepler that is currently in orbit detecting extra-solar earth-like planets.

Bob Woodruff was born and raised in Manhattan. He graduated from Manhattan High School in 1961 and enrolled at K-State where he earned a B.S. degree in physics in 1964. He went on to Univ. of Illinois where he earned an M.S. in physics in 1965.

Mr. Woodruff has over 45 years experience designing optical systems for U.S. space program missions making significant contributions to projects ranging from Skylab to the Hubble Space Telescope.

His technical specialties are optical physics, optics design, and optical system engineering. He has served in various roles in optical design, system engineering, testing and calibration in the development of more than 20 flight hardware instruments. Some of his designs have been operational in space continuously for nearly 40 years. Among these contributions, two activities stand out to include helping fix the Hubble Space Telescope spherical aberration flaw and conceiving and generating the optical concept and design for the Kepler mission.

He is an Associate of the Center for Astrophysics and Space Astronomy at the Univ. of Colorado in Boulder. He recently retired from Lockheed Martin as a Technical Fellow in the position of Chief Scientist for Optical Systems.



Technical Fellow, Chief Scientist for Optical Systems, Sensors & Exploration Systems at Lockheed Martin and

Associate of the Center for Astrophysics and Space Astronomy Univ. of Colorado- Boulder