

PHYSICS

UNIVERSITY OF MICHIGAN

PRESENTS

Today's Saturday Morning Physics Speaker



Timothy Chupp

Professor
(U-M Physics)

The Physics of Basketball

Abstract

Basketball is one of the world's most popular sports played and enjoyed by fans of all ages. Spectacular plays seem to defy the laws of physics, but like everything, basketball is packed full of interesting phenomena. Physics Professor Tim Chupp and Monika Wood, Physics Demonstration Lab Manager will demonstrate and explain the science of key elements of the game in this lecture designed to entertain and deepen your enjoyment of the sport.

Biography

Professor Chupp and his lab are involved in the development of precision measurement, optical pumping, and nuclear polarization techniques for application to a variety of fundamental and applied problems. A key direction of Professor Chupp's research is the measurement of manifestations of elementary particle interactions at low and intermediate energies to study physics beyond the standard model of elementary particle interactions. One important pursuit is the search for the CP-violating electric dipole moments of heavy atoms and the neutron, a problem closely related to understanding the apparent cosmological dominance of matter over antimatter. In this work, physics at short range is studied using symmetry and precision measurement techniques accessible with spin polarized systems. This lecture on *The Physics of Basketball* follows from Professor Chupp's enthusiasm for presenting all manner of physics to broad audiences at all levels.

Professor Chupp is a Fellow of the American Association for the Advancement of Science, a Fellow of the American Physical Society and was awarded the 1993 I.I. Rabi Prize.

YouTube Link to Saturday's Talk: <https://www.youtube.com/watch?v=oBmpwVeulpq>

Discover more about Saturday Morning Physics: <http://www.saturdaymorningphysics.org>

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