

**UCLA Department of Physics & Astronomy**

# **COLLOQUIUM**

Thursday, April 13 at 4 p.m.

1-434 PAB

## **To Ignition and Beyond!**

Denise Hinkel

(Lawrence Livermore National Laboratory)



Sixty years in the making – over 6 decades of scientific and technology development culminated in achieving ignition in the laboratory using the approach of inertial confinement fusion (ICF). From the time (~ 30 years ago) that Lawrence Livermore National Laboratory undertook key decision zero for construction of the National Ignition Facility (NIF), with the end goal of ignition, to present has been an “E-ticket ride”, meaning it has been very exciting! This journey was filled with scientific discovery, phenomenal technological advances, and teaming of simulation and data to drive advances in scientific understanding, in yield, and in target gain.

The fundamentals of inertial confinement fusion will be presented, as will an overview of the approach. A discussion of predictive capability will highlight why this work is a scientific grand challenge, and what the next steps are for the national ICF program.

Refreshments at 3:30 p.m. on the PAB Patio. Undergraduates Welcome!