PHYSICS AND ASTRONOMY COLLOQUIUM

Persis Drell, Ph.D.

Illuminating the Atomic World: The X-ray Free Electron Laser at SLAC

The Linac Coherent Light Source (LCLS) at SLAC National Accelerator Laboratory is the world's brightest source of hard X-ray laser light. Not only is this light a billion times brighter than any previous hard X-ray source, it also comes in strobe-like pulses just a few tens of femptoseconds long. This combination of high intensity and ultrafast pulses allows us to study processes at atomic time scales and atomic length scales. I will focus on the conception, construction, and start up of the LCLS, as well as some of the first experimental results, with a view to the new frontier of science that this remarkable tool has opened.



THURSDAY, APRIL 4, 2013 | 4:00 PM | HAWKING AUDITORIUM

