

CU Physics Department Colloquium

Monday, September 20, 2010 4:10 PM 428 Pupin Hall

The Large Synoptic Survey Telescope (LSST)

The Large Synoptic Survey Telescope is a large-aperture, wide-field, ground-based telescope designed to survey over half of the sky in six optical colors every few nights. As such, it will enable a wide array of diverse scientific investigations, ranging from studies of small moving bodies in the solar system to constraints on the structure and evolution of the universe as a whole. A National Academy of Sciences panel charged with prioritizing future programs in astronomy and astrophysics recently ranked LSST as the highest priority large ground-based project for the next decade. I will provide a brief overview of the design of LSST and then run through a "tour" of some of the most exciting science that is expected to come from this facility. Included will be topics in solar system science, stellar evolution, the structure of the Milky Way, galaxy formation, active galactic nuclei, the nature of the transient sky, and fundamental cosmology.

Steven Kahn, Stanford University

Hosted by Charles Hailey

