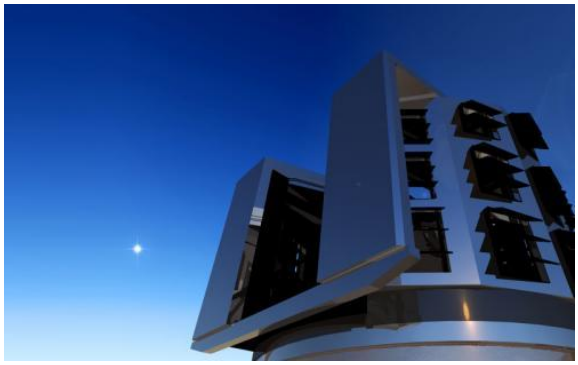
SMCAS General Meeting and Presentation on Nov 6, 2015

The Large Synoptic Survey Telescope
Dr. Joshua Meyers
Stanford University,
Kavli Institute for Particle Astrophysics and Cosmology

Friday, Nov 6, 2015 , College of San Mateo, Building 36
SMCAS General meeting at 7:00 p.m. ISC Room, room 110
Presentation at 8:00 p.m. Planetarium
Free and open to the public, free parking.

The LSST is a new kind of telescope. Currently under construction in the US and Chile, the LSST will use its unprecedented combination of large field-of-view (40 times the size of the full moon), enormous camera (3200-megapixels) and significant collecting area (27-foot diameter mirror) to rapidly and precisely map the entire visible sky every few nights. The survey will produce a high-resolution multicolor digital movie of the Southern sky over a ten year period, enabling a wide variety of astronomy pursuits ranging from the Earth's backyard to the edge of the visible Universe.



Individual LSST images will be immediately analyzed to identify objects that have changed or moved: from exploding supernovae billions of light years away to nearby asteroids that might impact the Earth. Over the ten-year survey lifetime, the images will also be combined to reveal a map of tens of billions of stars and galaxies. With this map, scientists will explore the structure of our own solar system and the Milky Way, determine the properties of dark energy and dark matter, and make discoveries that we have not yet imagined. Scientists in the US and Chile, LSST's International Affiliates, and the general public are invited to share in this voyage of discovery. What will you find?

In his presentation, Dr. Meyers will cover the LSST science mission, as well as the unique engineering and data analysis challenges and solutions required by LSST.

Dr. Meyers is a Postdoctoral Student at Stanford University with the Kavli Institute for Particle Astrophysics and Cosmology (KIPAC), working on aspects of the LSST. He earned his Bachelor of Science in Physics/Math/Astronomy at the University of Kansas, and his PhD in Physics at the University of California Berkeley in 2012. Before coming to Stanford, he was a graduate student researcher at Lawrence Berkeley National Laboratory.