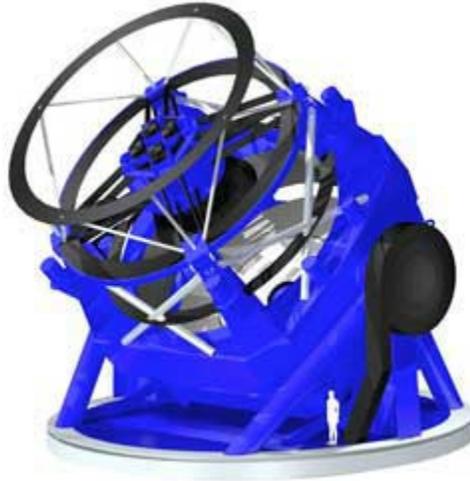


Keck Foundation Donates \$1.5 million to the Large Synoptic Survey Telescope

July 16, 2007

The W.M. Keck Foundation has announced a gift of \$1.5 million to the Large Synoptic Survey Telescope (LSST). The gift will be administered by the University of California, Davis, on behalf of the consortium building the telescope.

The support from the Keck Foundation is for the final phase of research and development of focal plane imagers, which will capture images in the telescope's giant camera. The LSST's three-billion pixel digital camera will use a novel imaging technology that is a critical and unique feature of the project.



"We are extremely grateful for the generous donation from the W.M. Keck Foundation," said LSST Director J. Anthony Tyson, professor of physics at UC Davis. "The focal plane imager is one of the most time-critical elements in this project. We can now address this long-lead technology, which could allow the project to meet its goal of completion in 2013."

Proposed to begin operations in 2014, the 8.4-meter LSST will survey the entire visible sky deeply in multiple colors every few nights, probing the mysteries of dark matter and dark energy, and opening a movie-like window on objects that change or move rapidly: exploding supernovae, asteroids that might pose a hazard to the Earth, and distant Kuiper Belt Objects.

Cerro Pachón, an 8,800-foot (2,682-meter) mountain peak in northern Chile, has been identified as the site for the proposed telescope.

The focal plane imagers are the heart of the telescope, enabling a field of view of 10 square degrees, or 50 times the size of the moon. Coupled with the light-gathering power of the telescope, this novel focal plane imager will provide unprecedented sky coverage, cadence and depth, allowing the LSST to attack high-priority scientific questions that are far beyond the reach of any existing facility.

"The Keck Foundation grant is essential to develop the new technology for focal plane imagers that we need for LSST," said the LSST Deputy Director Steve Kahn of the Kavli Institute for Particle Astrophysics and Cosmology at Stanford University.

To develop the imager, the LSST project is taking advantage of expertise in silicon devices at Brookhaven National Laboratory as well as experience in optical charge-coupled devices (CCDs) at the Harvard-Smithsonian Center for Astrophysics and at UC Davis. The Stanford Linear Accelerator Center is leading the overall research and development effort to build the camera.

More information about the LSST, including current images, graphics, and animation can be found at <http://www.lsst.org>.

The W.M. Keck Foundation was established in 1954 by the late W.M. Keck, founder of the Superior Oil Company. The foundation's grant making is focused primarily on pioneering efforts in the areas of medical research, science and engineering. The foundation also maintains a program to support undergraduate science and humanities education and a Southern California Grant Program that provides support in the areas of health care, civic and community services, education and the arts, with a special emphasis on children.

In 2003, the LSST Corporation was formed as a nonprofit 501(c)3 Arizona corporation with headquarters in Tucson, Ariz. Membership has since expanded to more than 20 members including Brookhaven National Laboratory, California Institute of Technology, Columbia University, Google Inc., Harvard-Smithsonian Center for Astrophysics, Johns Hopkins University, Kavli Institute for Particle Astrophysics and Cosmology - Stanford University, Las Cumbres Observatory Inc., Lawrence Livermore National Laboratory, National Optical Astronomy Observatory, Princeton University, Purdue University, Research Corporation, Stanford Linear Accelerator Center, The Pennsylvania State University, The University of Arizona, UC Davis, UC Irvine, University of Illinois at Urbana-Champaign, University of Pennsylvania, University of Pittsburgh and the University of Washington.

The LSST is a public-private partnership. Design and development activity is supported in part by the National Science Foundation under Scientific Program Order No. 9 (AST-0551161) through Cooperative Agreement AST-0132798. Portions of this work are supported by the U.S. Department of Energy under contract DE-AC02-76SF00515 with the Stanford Linear Accelerator Center, contract DE-AC02-98CH10886 with Brookhaven National Laboratory, and contract W-7405-ENG-48 with Lawrence Livermore National Laboratory. Additional funding comes from private donations, grants to universities, and in-kind support at Department of Energy laboratories and other LSSTC Institutional Members.

Additional information:

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