

LARGE SYNOPTIC SURVEY TELESCOPE RESEARCH INITIATIVE RECEIVES HIGH-PROFILE PLEDGE

Philanthropists Bill Gates and Charles Simonyi Issue Surprise \$500,000 Challenge

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Tucson, Arizona - Philanthropists **Charles Simonyi and Bill Gates** pledged \$500,000 to kick-start a \$1 million science research initiative at the Large Synoptic Survey Telescope (LSST) M1/M3 mirror completion celebration in Tucson, Arizona on Saturday. The pledge is contingent on the LSST Corporation's (LSSTC) success in raising at least \$500,000 more to enable the full science utilization of the unique petabyte-scale LSST database, said David MacFarlane, chairman of the LSSTC board.

Simonyi and Gates supported the construction of the telescope mirrors with \$20 million and \$10 million gifts respectively in 2008— but Friday's announcement was an inspiring surprise. LSSTC CEO Pat Eliason said the corporation eagerly accepts this challenge. "This is a transformative moment," she said, "not just for LSST, but for the tens of millions of people who will participate in our journey of cosmic discovery".

The LSST epitomizes the new era of big data in astronomy and physics. In its first month of operation, the LSST will see more of the universe than all previous telescopes combined. Its rapid-fire, 3-billion pixel digital camera will open a movie-like window on objects that change or move; its superb images will enable mapping the cosmos in 3D as never before. Surveying the entire sky every few days from a mountaintop in Chile, LSST will begin providing data in real time to both astronomers and the public in 2022.

"The science enabled by LSST will not be limited by our ability to collect data but rather our ability to mine science from the resulting enormous volume of data", said Andrew Connolly, an astronomer at the University of Washington.

The challenge wowed an audience of about 130 nationwide community supporters, scientists and faculty from the LSST's member institutions attending the celebration event. "This extraordinary pledge will be the catalyst to address the next major challenges in big data research, and it is incumbent on every one of us to do what he or she can to keep the vision coming," said LSST Project Director Steve Kahn.

The LSSTC's mission is to now secure and steward private funding to enable the full science potential of the LSST database, a mindboggling task. "Building a whole team is very important

to get this going as soon as we can”, said Bill Gates, during the video that was shown at the event.

About the LSST

The LSST is a new kind of telescope. It is a survey telescope that will open up the "time domain" to astronomy by mapping the entire sky - DEEP, WIDE, FAST, and continuously for years to come. The scientific impact of the LSST will be transformative across all fields of cosmology, astronomy, and physics. For more information please visit lsst.org.

About the LSST Corporation

The LSST Corporation (LSSTC) formed in 2003 as a non-profit Arizona corporation with four founding institutional members – The University of Arizona, The University of Washington, the Research Corporation for Science Advancement, and AURA, through its operating center, the National Optical Astronomy Observatory (NOAO). Today there are nearly 40 University and Institutional Members of the LSSTC. With headquarters in Tucson, Arizona, the Corporation’s primary purpose is to advance research and education by collaborating in the preparation for operation of the Large Synoptic Survey Telescope system. Through its stewardship of the private funding portion of the public/private partnership to build and operate LSST, the Corporation has contributed significantly to the LSST Project by facilitating early site preparation, mirror construction, and data management system development. For more information please visit lsstcorporation.org.