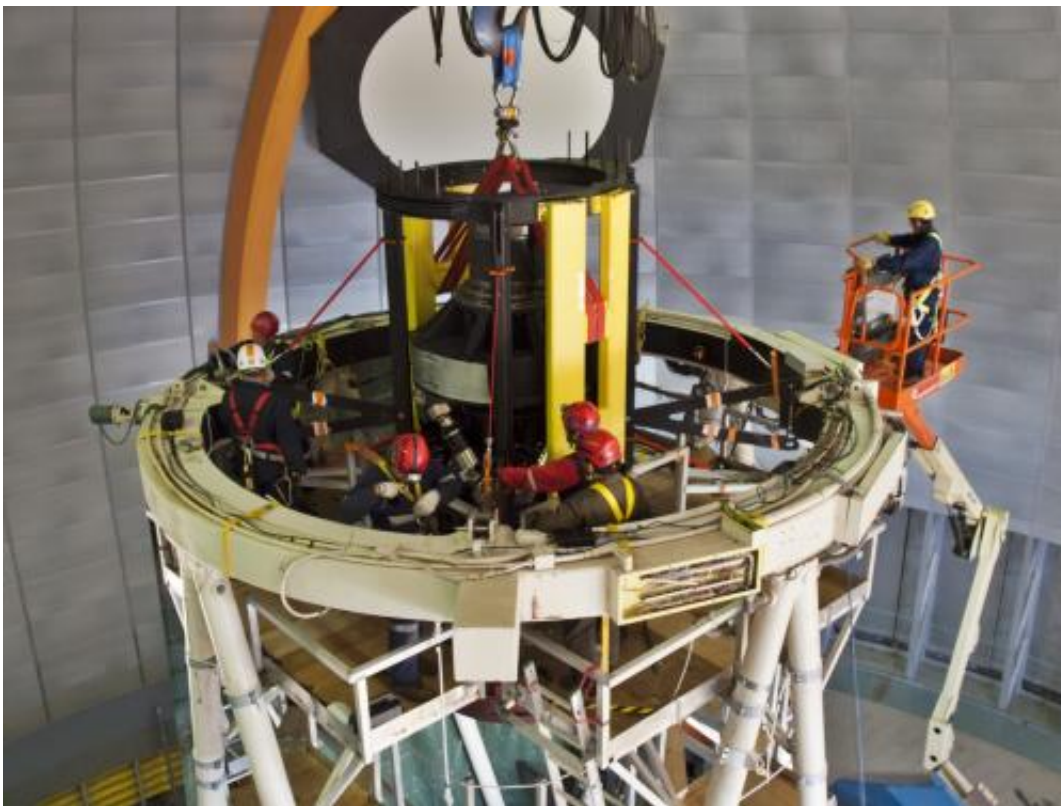


# Dark energy camera dedication begins celebration of 50th anniversary of Cerro Tololo Inter-American Observatory

November 2 2012

---



With the Blanco 4-m telescope locked in a vertical position and the old prime focus cage removed, the new DECam prime focus cage is bolted in place at the top of the telescope. The new cage is braced by the yellow “strongbacks” and in the picture can be seen being fixed in place using the "spider" legs (two can be identified by the orange and white stripes), and surrounded by the installation team standing on custom work platforms. The installed cage contains some of the largest lenses in the world. Minimum credit line: T. Abbott & CTIO/NOAO/AURA/NSF

(Phys.org)—On November 9, 2012, ceremonies on the summit of Cerro Tololo, Chile will mark the dedication of the Dark Energy Camera and the beginning of the 50th anniversary celebration of Cerro Tololo Inter-American Observatory (CTIO). Speakers will include Drs. David Silva (NOAO Director), R. Christopher Smith (Director of AURA Observatories in Chile), Nicole van der Blik (CTIO Director), Joshua Frieman (Director of the Dark Energy Survey), Timothy Abbott and Alistair Walker (CTIO), and Brenna Flaugher (Fermilab).

The Dark Energy Camera installed on the 4-meter Victor M. Blanco telescope at CTIO will conduct a powerful survey collecting light in each snapshot from 100,000 galaxies located up to 8 billion light years away. The camera has 62 charged-coupled devices (570-megapixels) with an unprecedented sensitivity to very red light, creating the most powerful sky-mapping machine ever available. The Dark Energy Survey will attempt to answer one of cosmology's greatest mysteries—why the [expansion of the universe](#) is speeding up rather than slowing down due to gravity.

"Bringing the [Dark Energy](#) Camera online and making it available for the [astronomical community](#) through NOAO's open access telescope allocation is a milestone in the history of Cerro Tololo," said Nicole van der Blik, Director of the Cerro Tololo Inter-American Observatory. "We are very proud that we start the celebration of 50 years of service by CTIO to U.S. astronomers with the dedication of this brand new capability." The Dark [Energy Survey](#) is expected to begin after the camera is fully tested, about one month after the dedication. This wide-field survey will create detailed color images of one-eighth of the sky, or 5,000 square degrees, to discover and measure 300 million galaxies, 100,000 [galaxy clusters](#), and 4,000 supernovae.

Cerro Tololo Inter-American Observatory was founded 50 years ago on November 23, 1962 when Cerro Tololo was chosen as the site for the U.S. [southern hemisphere](#) observatory complex and the observatory's current name was adopted. An historic milestone was the construction of what was then the largest telescope in the southern hemisphere, the 4-meter Blanco telescope. The Blanco mirror arrived on Cerro Tololo in September 1974, and on November 8 of that year an informal prime focus "first-light" ceremony was held. Visiting astronomers first started observing with this telescope in January 1976. The principal telescopes on the AURA sites on Cerro Tololo and nearby Cerro Pachón are the 4-m Victor M. Blanco Telescope, the 4.1-m Southern Astrophysical Research (SOAR) [telescope](#), and one of the 8-m telescopes comprising the Gemini Observatory. More than 10 other telescopes and astronomical projects also share the Cerro Tololo site.

Provided by National Optical Astronomy Observatory

Citation: Dark energy camera dedication begins celebration of 50th anniversary of Cerro Tololo Inter-American Observatory (2012, November 2) retrieved 23 April 2024 from <https://phys.org/news/2012-11-dark-energy-camera-dedication-celebration.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--