

Large Synoptic Survey Telescope (LSST)

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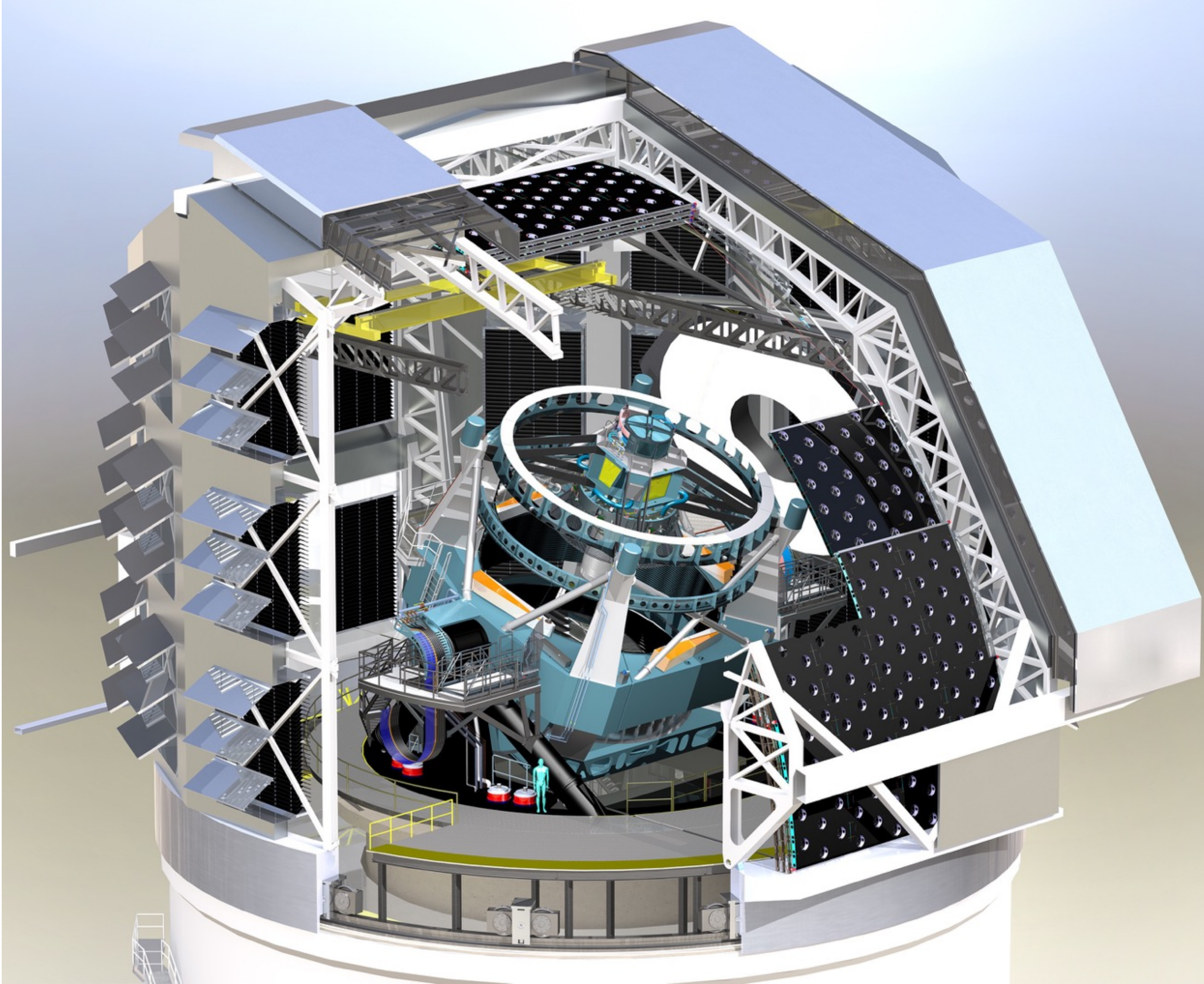
LSST Survey

8-meter class wide-field ground based telescope in Chile
will conduct a 10 year survey of the optical sky
will have an automated data processing system
will have the biggest digital camera ever built!



June 2018

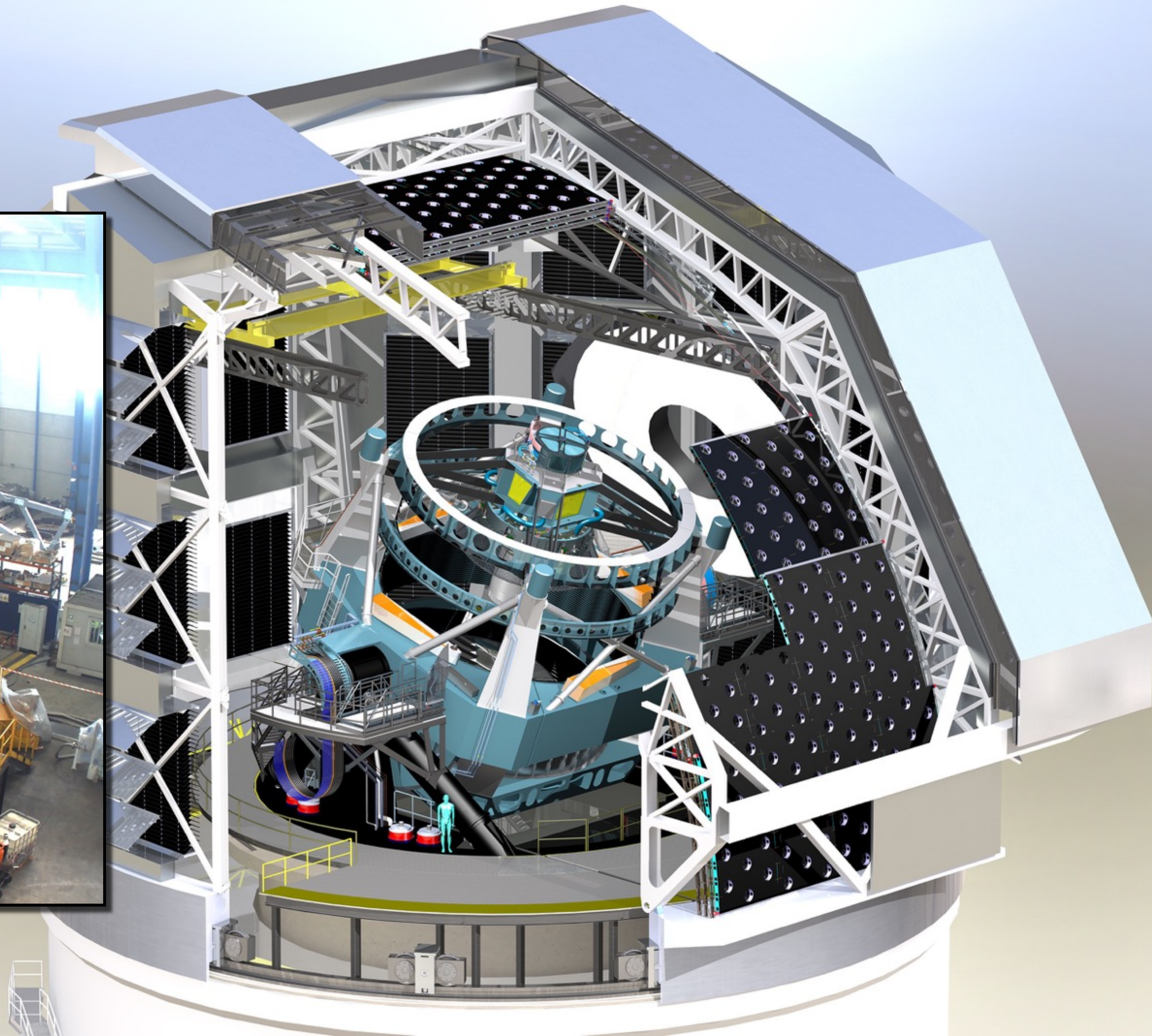
Telescope



Telescope

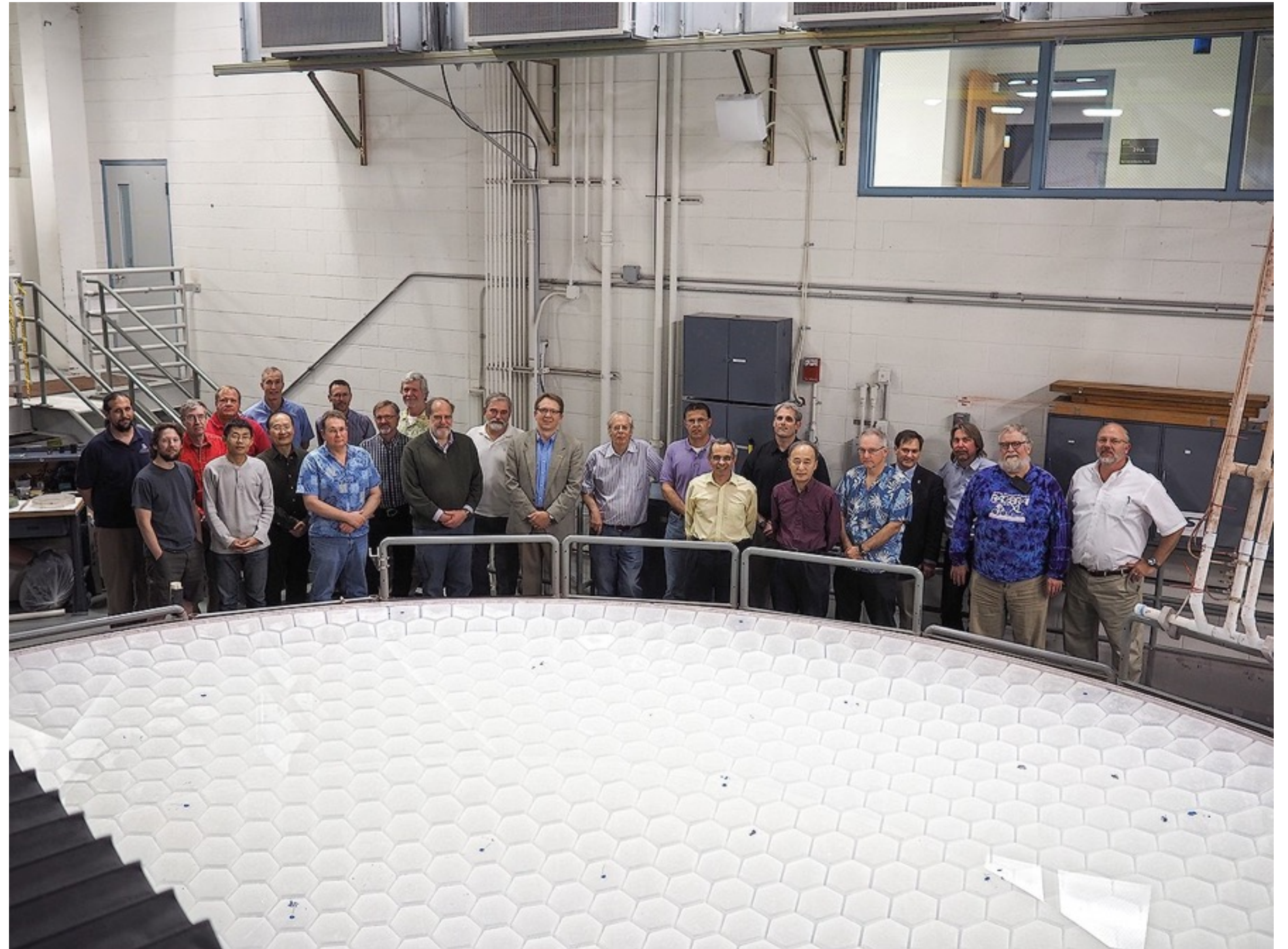
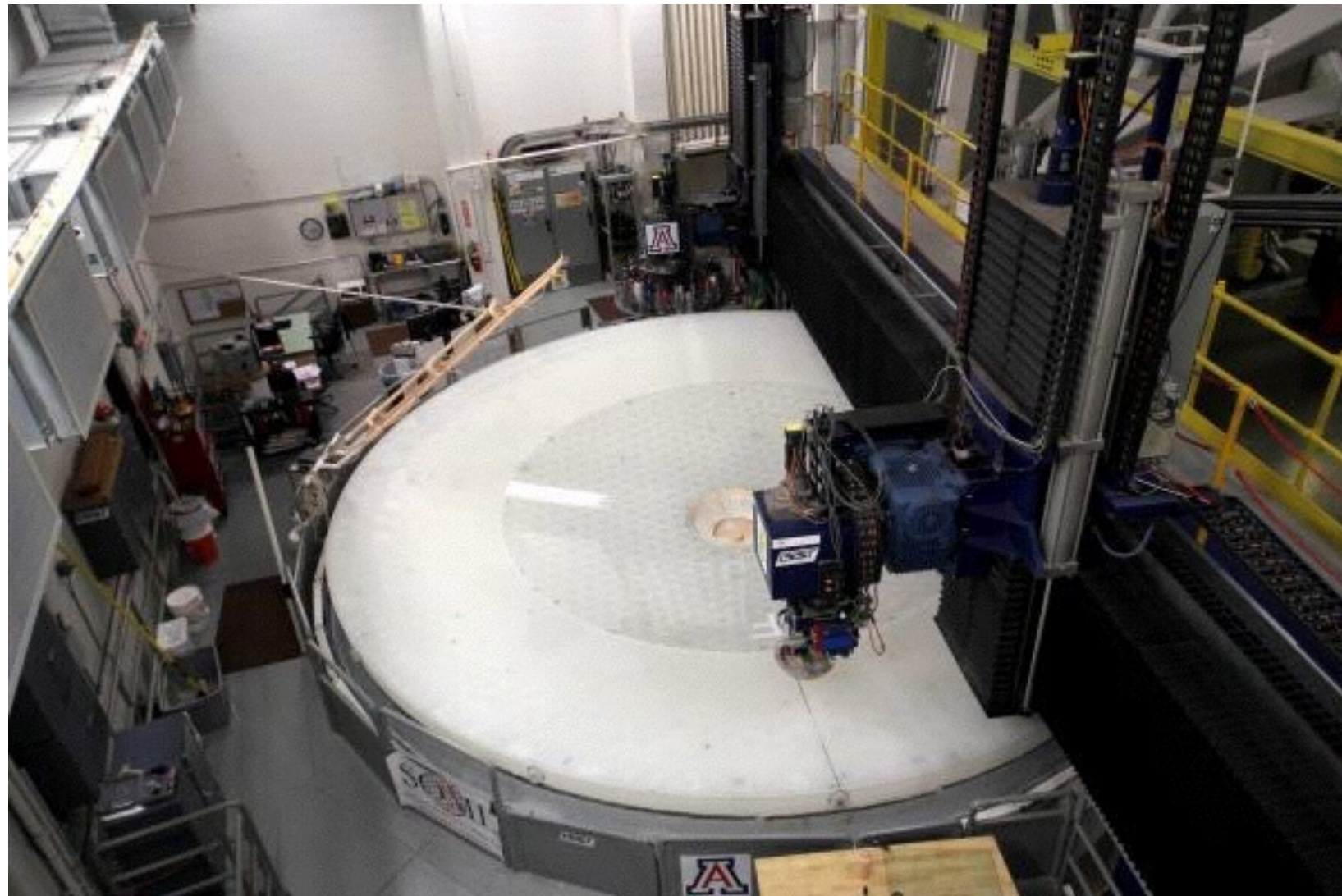


May 2018. Credit: LSST Project



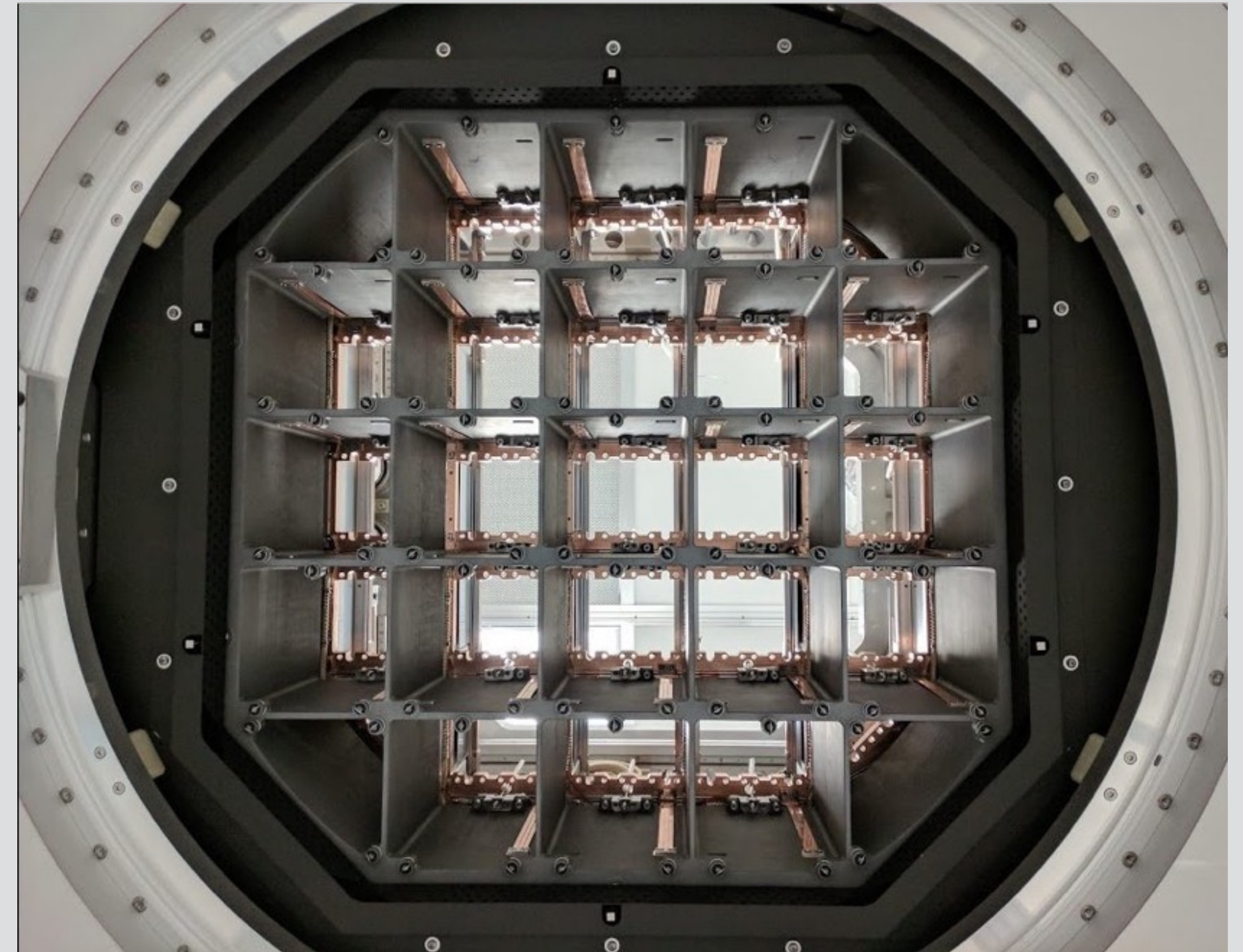
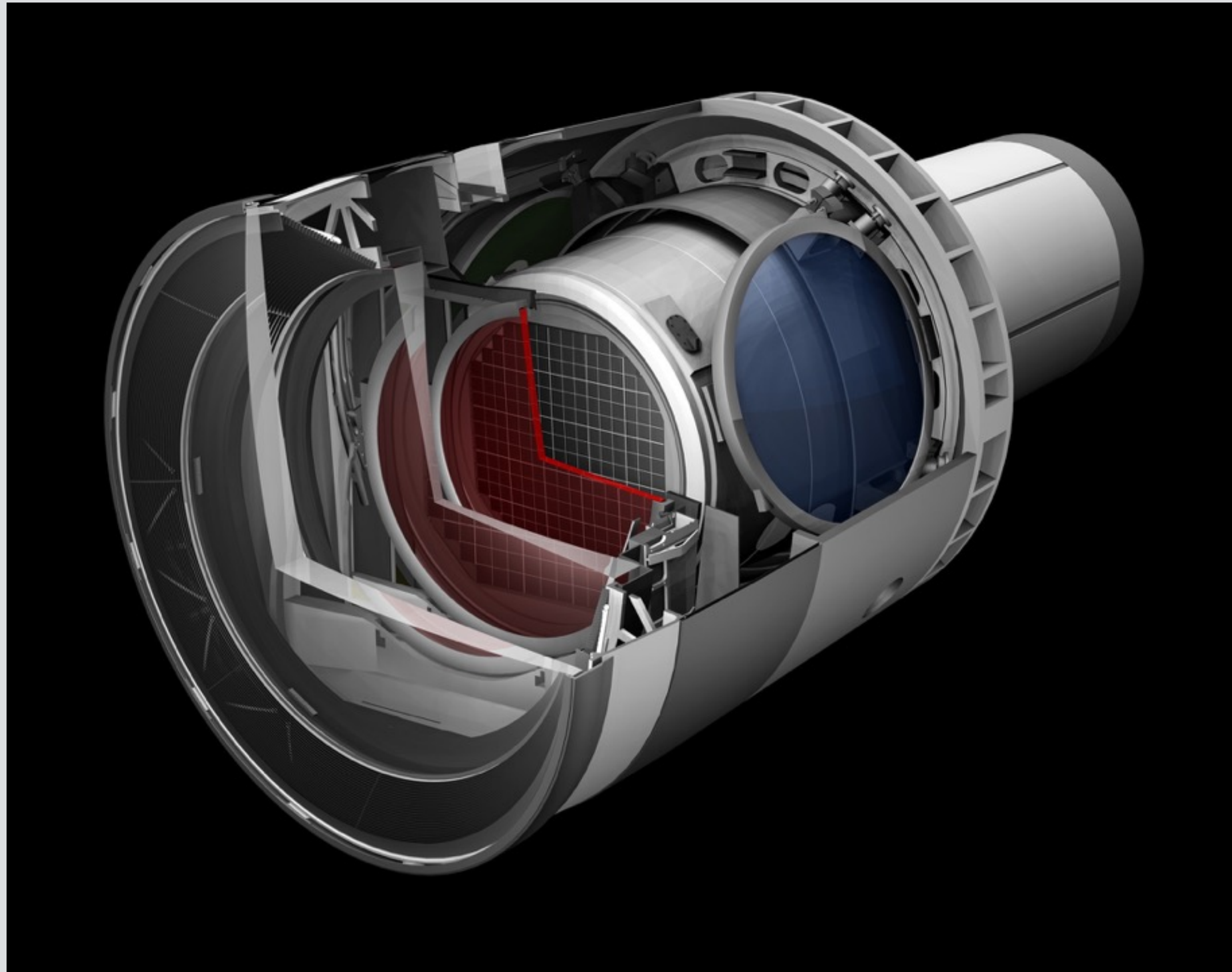
The Mirror

2015



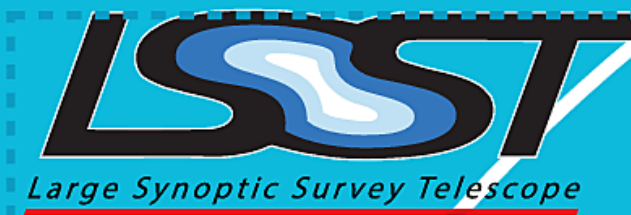
The biggest digital camera ever built!

It's the size of a small van



Cryostat that will hold the CCDs, June 2018.
Credit: John Ku/LSST Project

The unique
telescope design
and the 3.2 Gpix
camera combine
to create HUGE
images



www.lsst.org
 @lsst

In the first year of operation, LSST will
produce more data and record more
asteroids, stars, galaxies, and quasars,
than all previous telescopes combined.

**LSST will for the first time detect
more celestial objects than there
are living people on Earth.**



A wide-field photograph of the night sky. The Milky Way galaxy is visible as a dense, diagonal band of stars and interstellar dust, stretching from the upper right towards the lower left. The stars appear as numerous small, bright points of light. The planet Jupiter is visible as a single, very bright, circular object with a soft, out-of-focus glow, located in the lower-left quadrant of the image. The background is a deep, dark blue-black, representing the vastness of space.

LSST will see more than 37 billion stars and galaxies

Four main LSST science themes

Find moving objects in the solar system

Map the the Milky Way galaxy

Explore the changing optical sky

Understand dark matter and dark energy



2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

NSF MREFC funding begins

DOE CD-2 review

DOE CD-3 review

SLAC I&T facility ready

Focal Plane
Grid Received

Light up
LSST network

50% Sensor
Production Complete

Summit substantial
completion

Auxiliary Telescope data
processing system available

Camera LI-L2 assembly complete

Telescope & Site substantial completion,
System integration & test start

Data Access Services
available at US DAC

System First Light

Full science operations
Survey Begins

Primary mirror complete

First Stone



Lower enclosure
ready for dome

First production
science raft complete

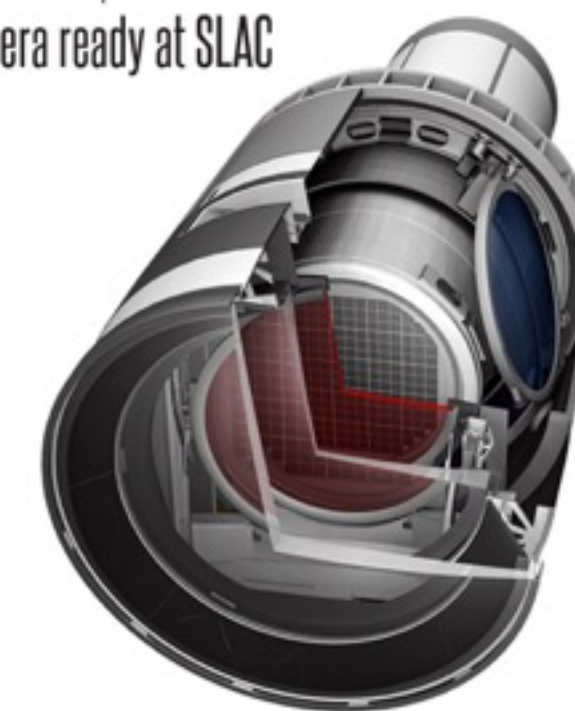
First Prototype Science Platform

Base facility complete



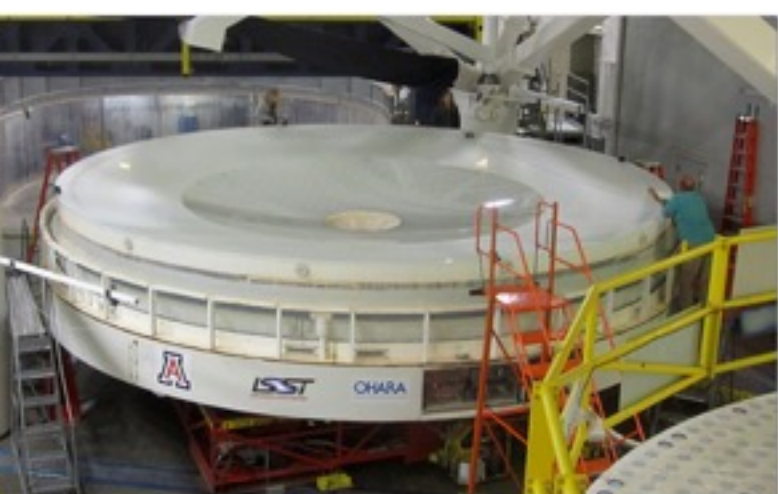
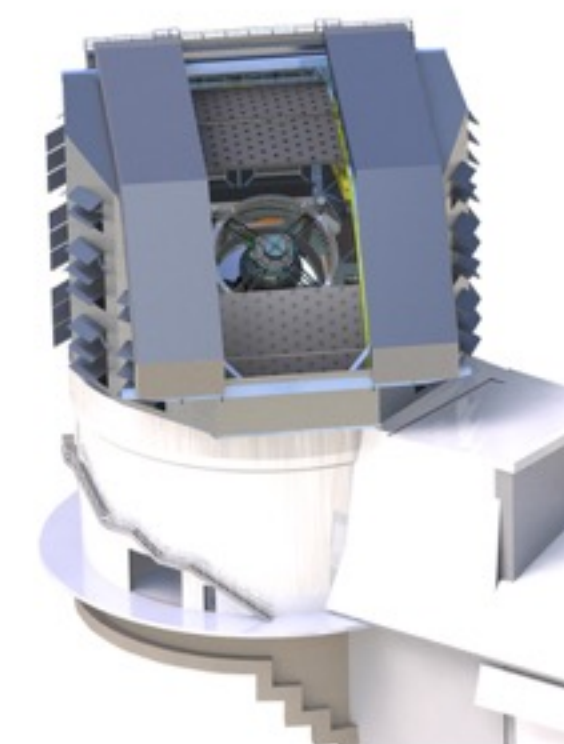
Commissioning Camera
ready for testing

Camera ready at SLAC



Engineering first light

Science verification complete



The **mission** of LSST EPO is to offer accessible and engaging online experiences that provide non-specialists access to, and context for, LSST data so anyone can explore the Universe and be part of the discovery process



Thank You For Being Here!



All The Best For The Week