

Steward Observatory Through the Years



Dr. Aden Meinel, the first Director of the Kitt Peak National Observatory, became the 3rd Director of Steward Observatory, replacing Edwin Carpenter, who died of a sudden heart attack on February 11, 1963.

Dr. Meinel, who would serve as Director until 1966, was responsible for securing a grant from the National Science Foundation for the purpose of building the Steward facilities and faculty.

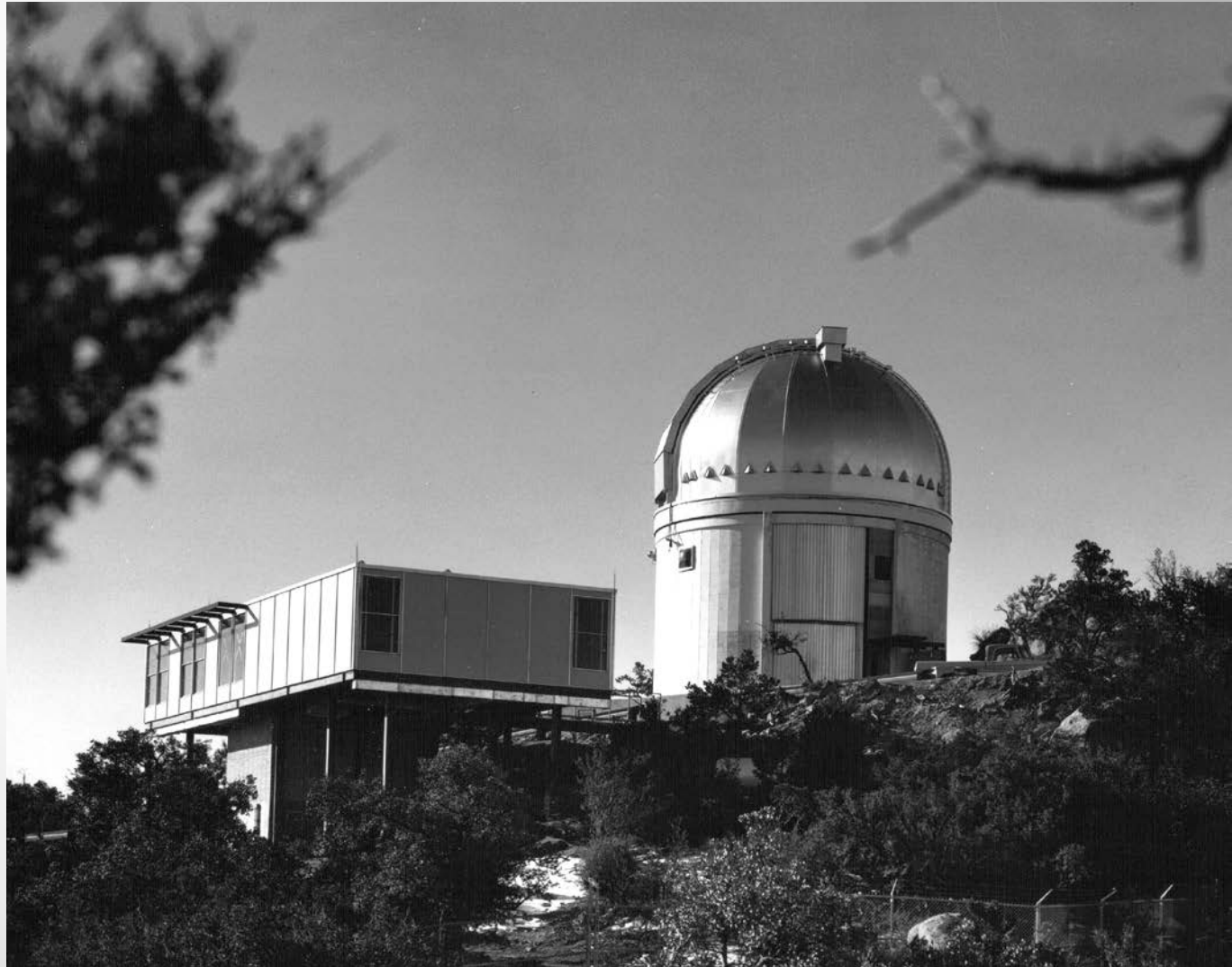
Steward Observatory Through the Years



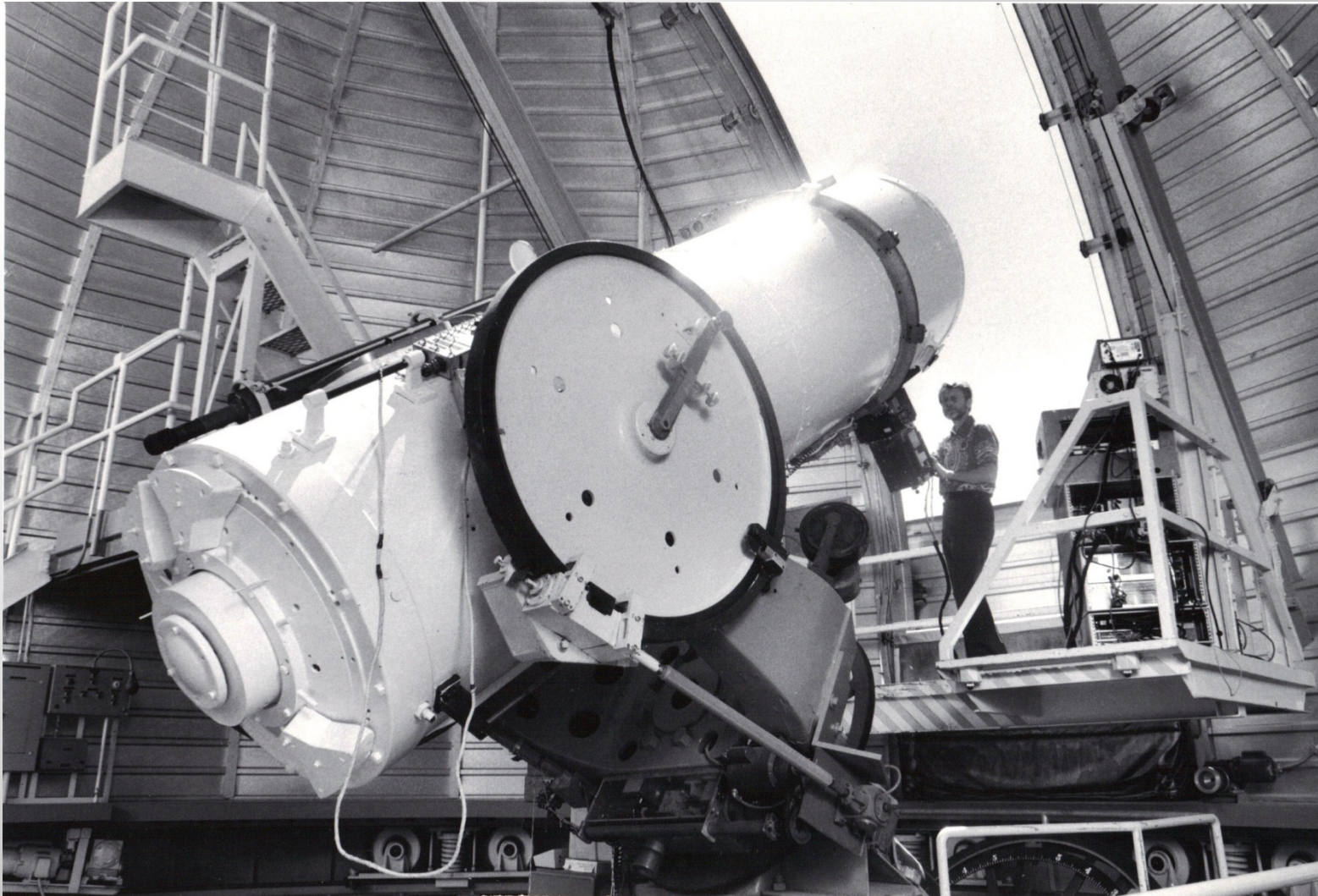
In 1963, the 36-inch telescope was removed from the original Steward dome and relocated to Kitt Peak. (Note that the College of Education building is under construction in the background on the right.)

Steward Observatory Through the Years

The original Steward 36-inch telescope was relocated to this dome on Kitt Peak in 1963. Since 1982, it has been used by the Space Watch Project.



Steward Observatory Through the Years

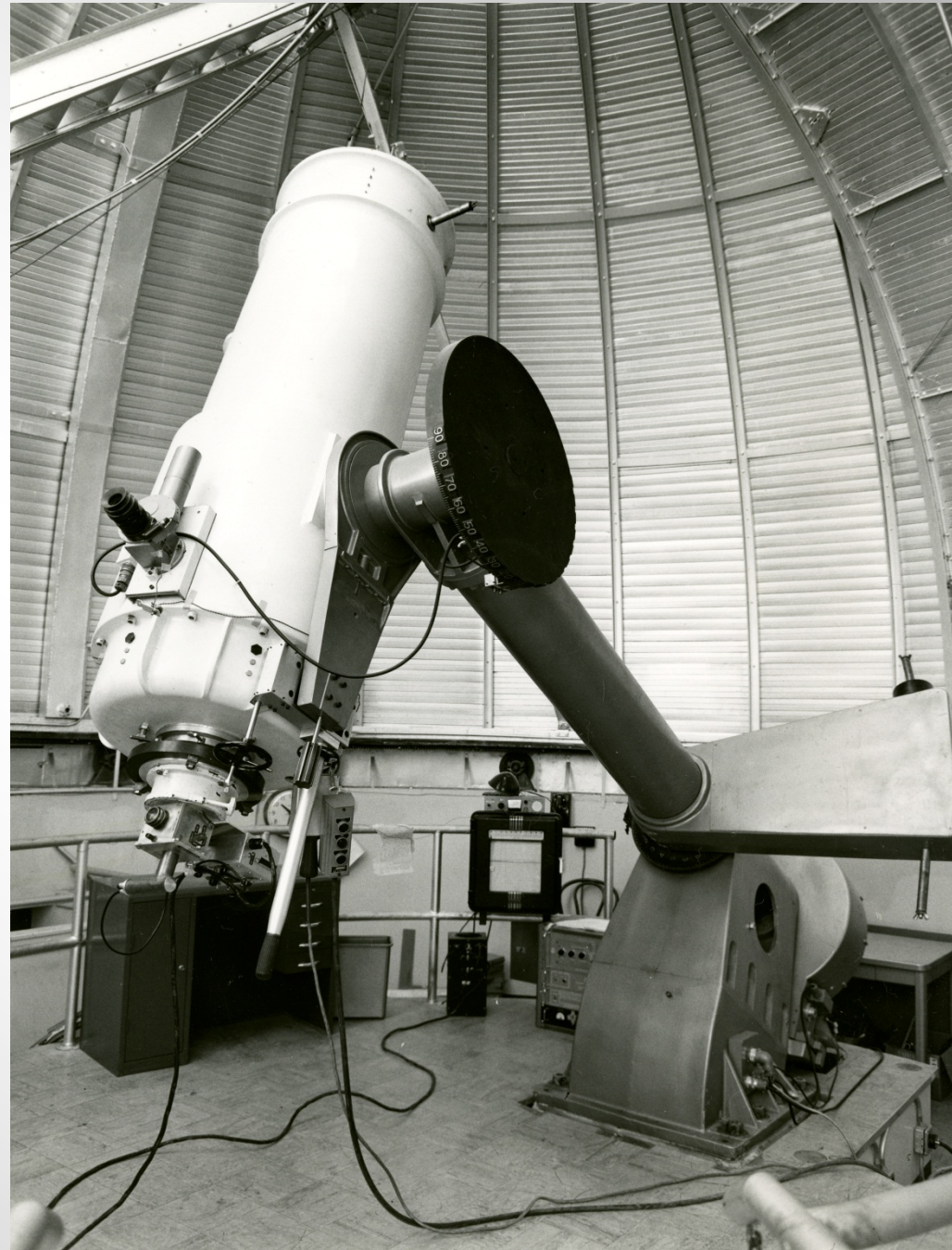


Founded by Prof. Tom Gehrels (pictured), the Space Watch Project studies small objects in the Solar System and scans for potentially hazardous objects near Earth using the 36-inch (now painted white).

Steward Observatory Through the Years

In 1964, the 36-inch Telescope was replaced by a 21-inch Cassegrain reflecting telescope in the original Steward Observatory dome.

Shown here with a photoelectric photometer, it was used by students for educational projects and by the public as part of the Public Evening Lecture Series.



Steward Observatory Through the Years



Steward Observatory ca. 1965

Steward Observatory Through the Years

1969



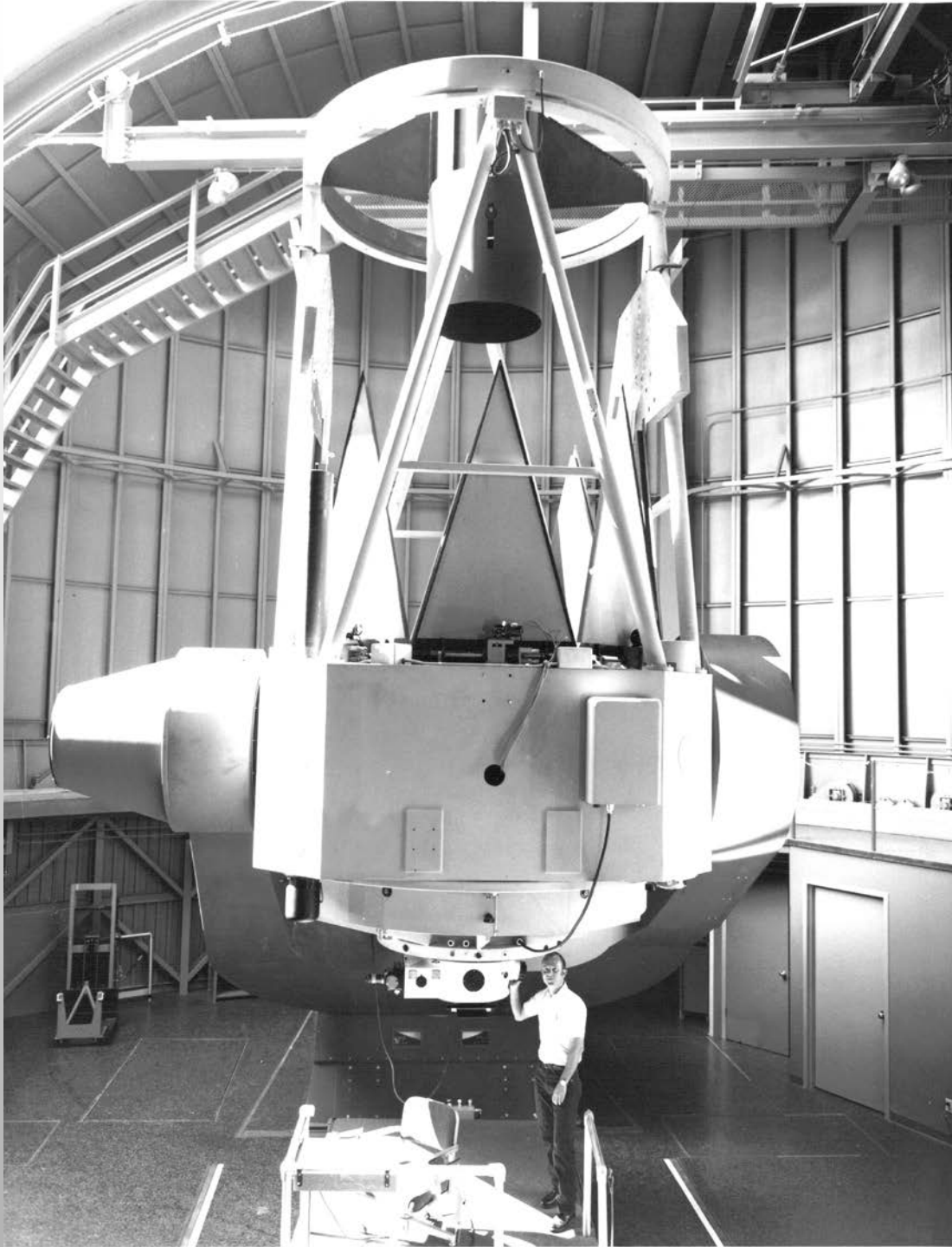
Using the 36-inch Telescope, Steward Obs. astronomers (L-R) Mike Disney, John Cocke, and Don Taylor discover the optical pulsar at the heart of the Crab Nebula (M1) in 1969.

Steward Observatory Through the Years



In 1967, a new building was constructed on Kitt Peak to house a 90-inch reflector.

Steward Observatory Through the Years



The 90-inch Bok Telescope:
the workhorse of the 1970s &
1980s.

Steward Observatory Through the Years



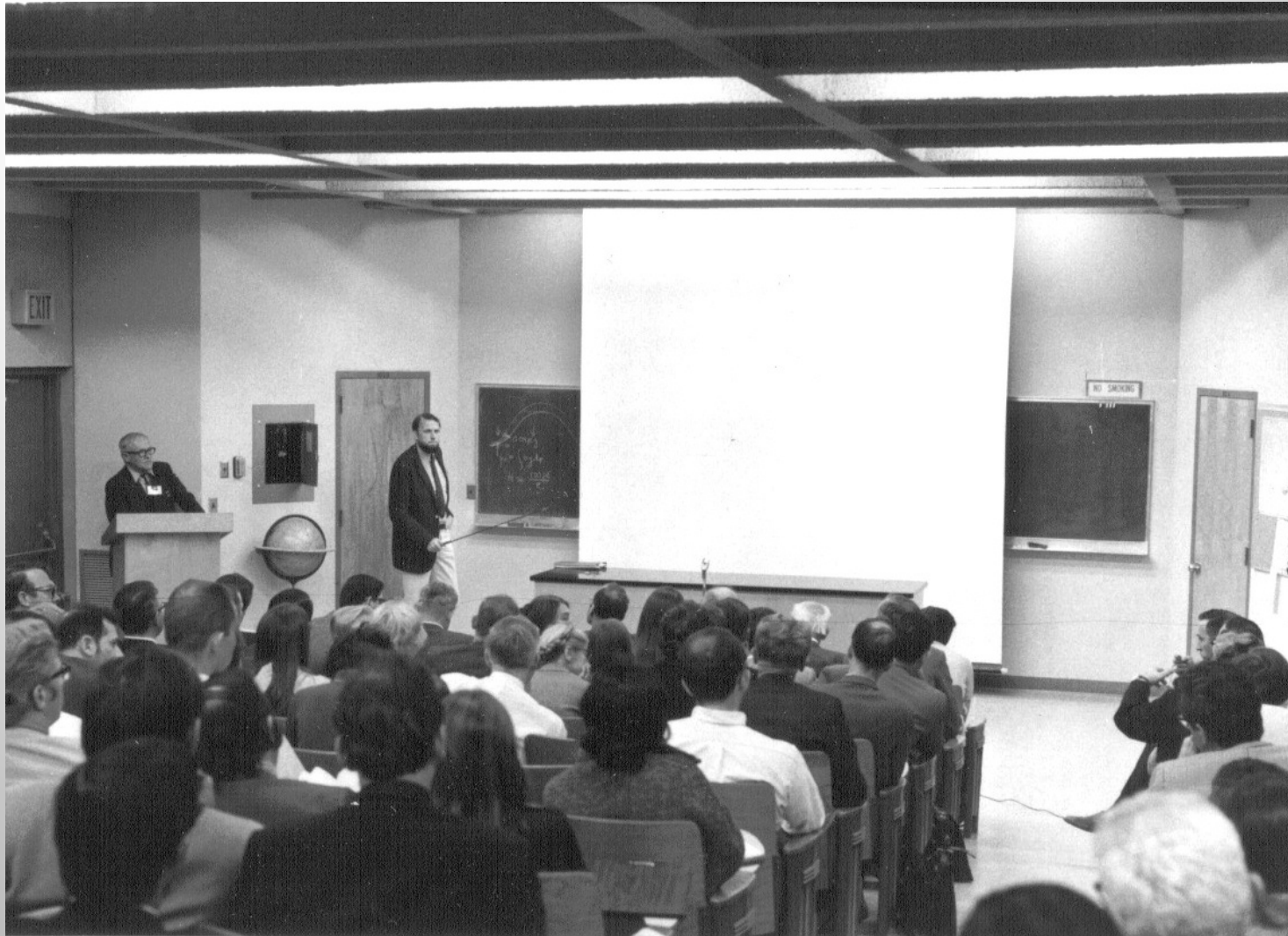
Present at the dedication of the 90-inch Telescope in October 1969 were Prof. Bart J. Bok, 4th Director of SO, UA President Richard Harvill, Dr. Howard Page from NSF, & Prof. Aden Meinel, 3rd Director of SO.

Steward Observatory Through the Years



Bart & Priscilla Bok pose with colleagues, including incoming 5th Director Ray Weymann, during the Bok Symposium held at UA in 1970.

Steward Observatory Through the Years



The Bok Symposium
1970

The Steward Observatory lecture hall which was in use from 1960 – 1992. The room was divided into two smaller classrooms in 1992 and are today known as SO 202 & SO 204.

Steward Observatory Through the Years

Mt. Lemmon



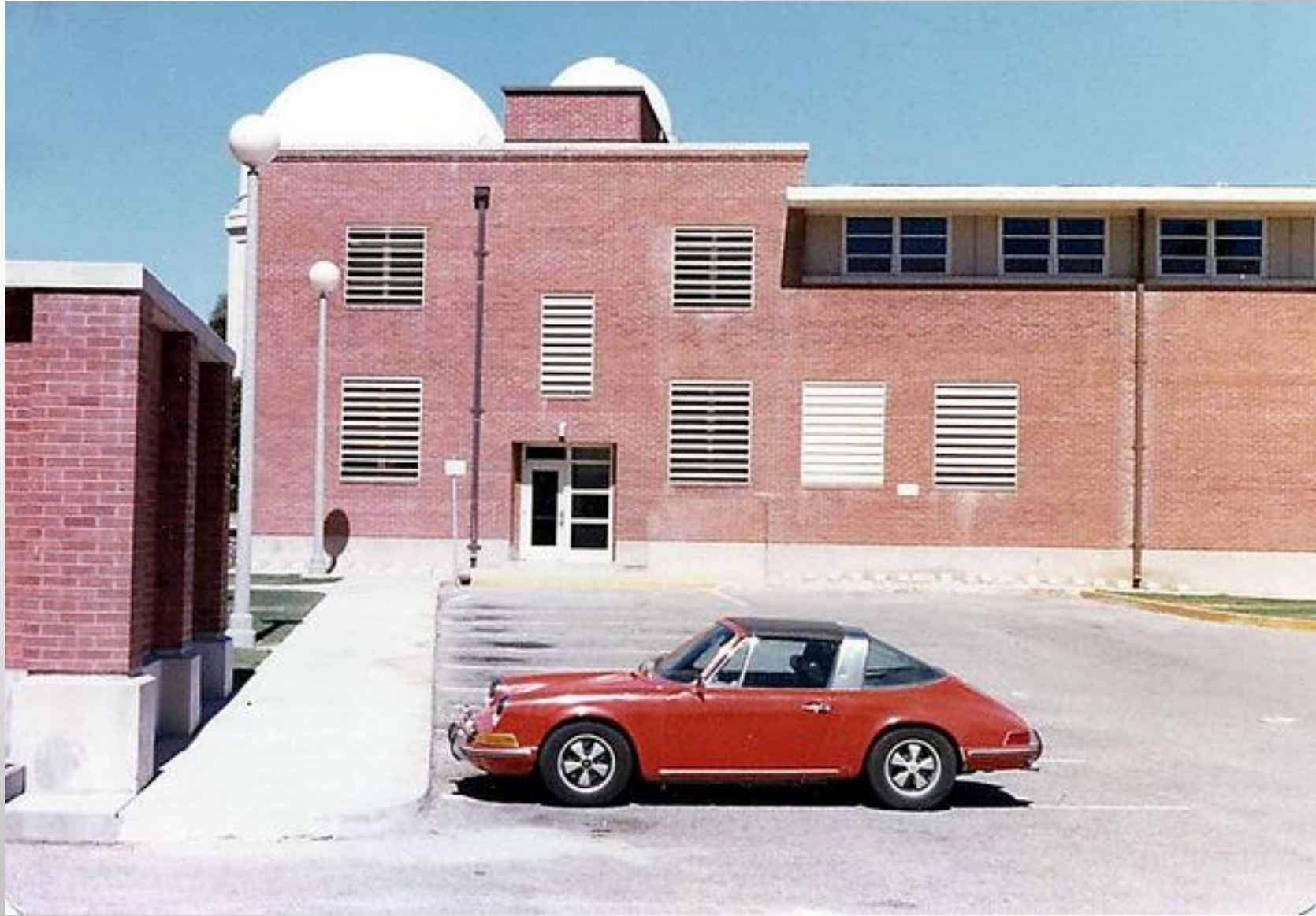
The Catalina Observatories, built by Lunar & Planetary Lab. in 1960s, later merged with the Steward observatories. This peak is now home to the Mt. Lemmon SkyCenter.

Steward Observatory Through the Years



The 61-inch Kuiper Telescope near Mt. Bigelow was built by the Lunar & Planetary Lab. in the 1960s with funds from NASA to create a detailed atlas of the Moon's surface in order to identify landing sites for the Apollo missions.

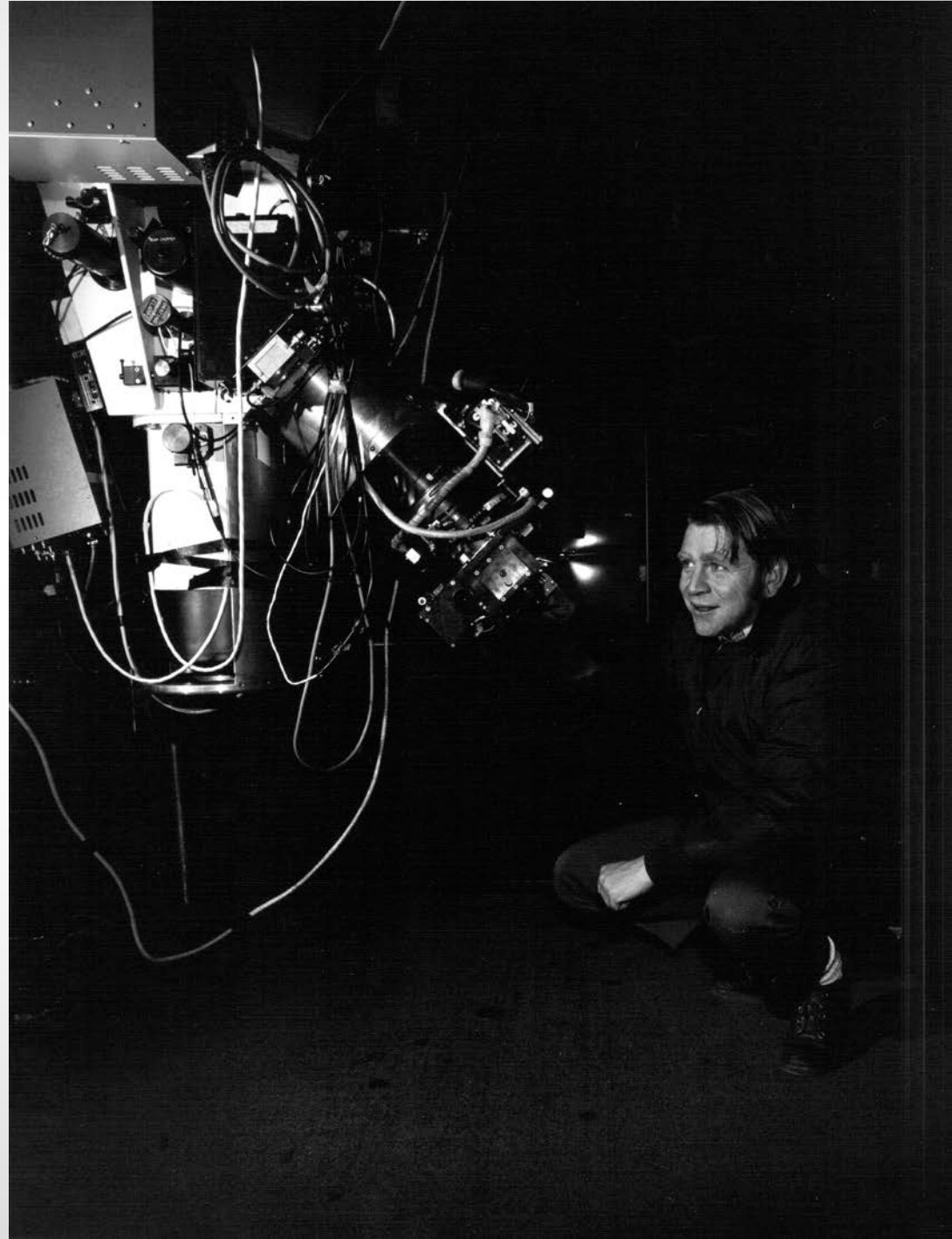
Steward Observatory Through the Years



A sports car belonging to Prof. Carl Sagan is parked outside of Steward Observatory during the Cornell professor's visit in 1972.

Steward Observatory Through the Years

Prof. Peter A. Strittmatter assumed leadership of Steward Observatory in 1975 as its 6th Director.



Steward Observatory Through the Years



Steward Observatory ca. 1975

Steward Observatory Through the Years



Steward faculty, staff, & students of the 1970s...

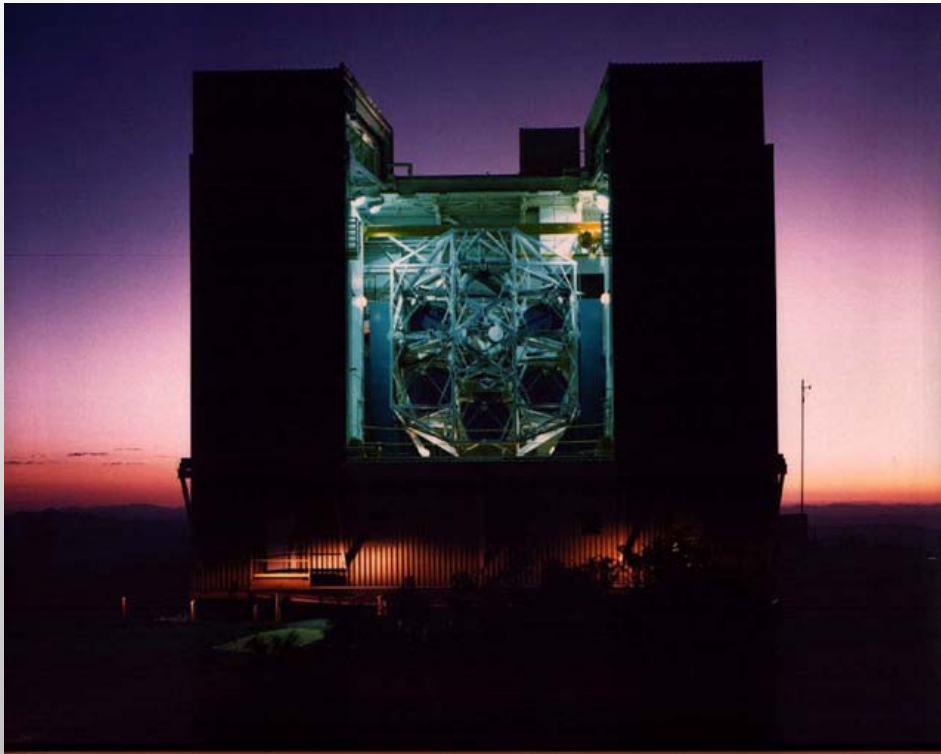
Steward Observatory Through the Years



...in celebration!

Steward Observatory Through the Years

The Multiple Mirror Telescope Mt. Hopkins



1979

6 mirrors effectively 4.5-m telescope



2000

1 mirror 6.5-m telescope

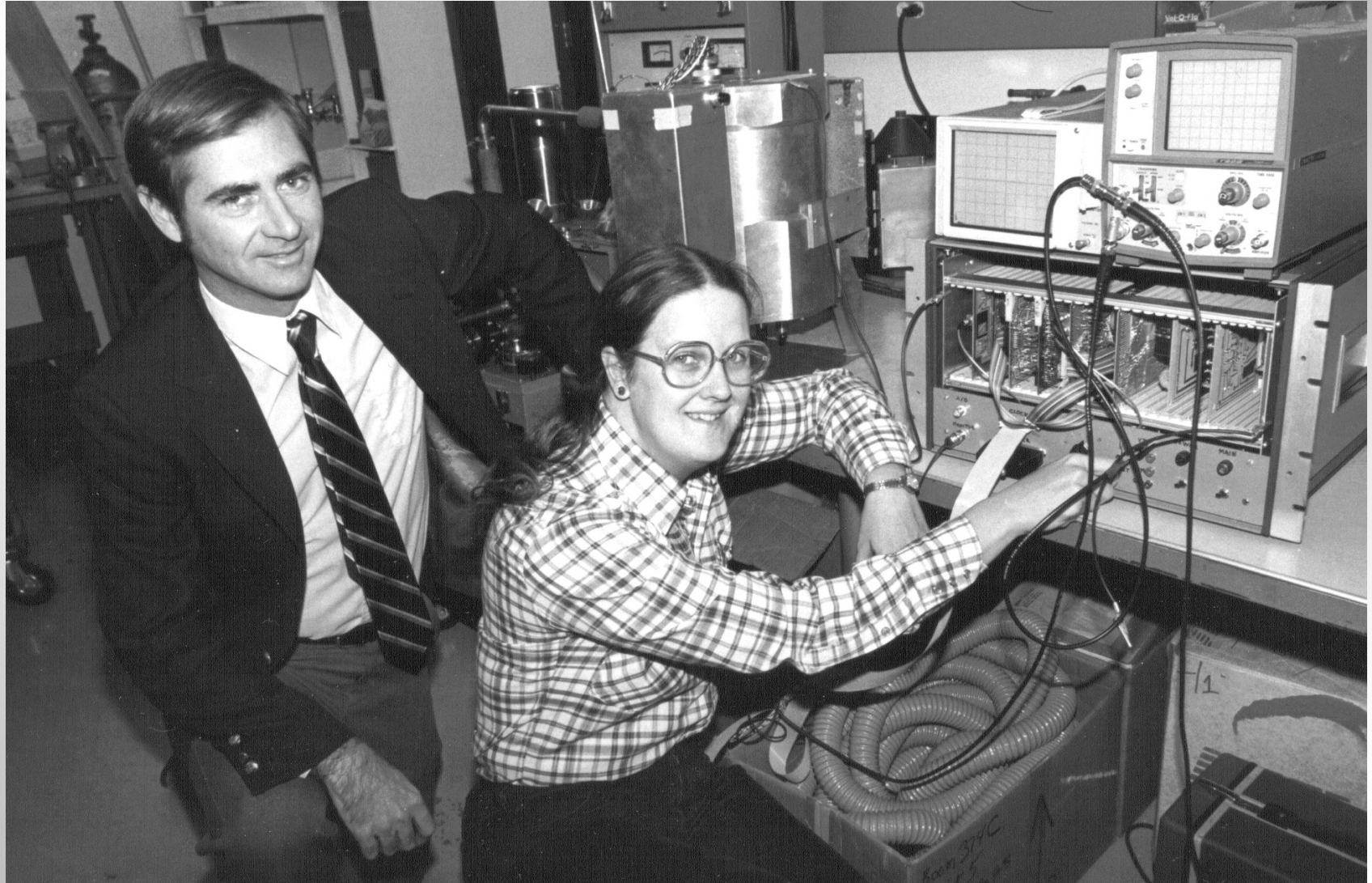
first telescope to use compact, “non-dome” enclosure

Steward Observatory Through the Years



Infrared Astronomers: Erick Young & Frank Low

Steward Observatory Through the Years



Infrared Astronomers: Rodger Thompson & Marcia Rieke

Steward Observatory Through the Years



A violent monsoon storm tore the roof off of the first Steward Observatory addition in August 1982.

Steward Observatory Through the Years



The view from Cherry Avenue as construction begins on the “U-shaped” addition to Steward Obs. in November 1983.

Steward Observatory Through the Years



The view from the College of Education in January 1984 as the “U-shaped” addition was under construction.

Steward Observatory Through the Years



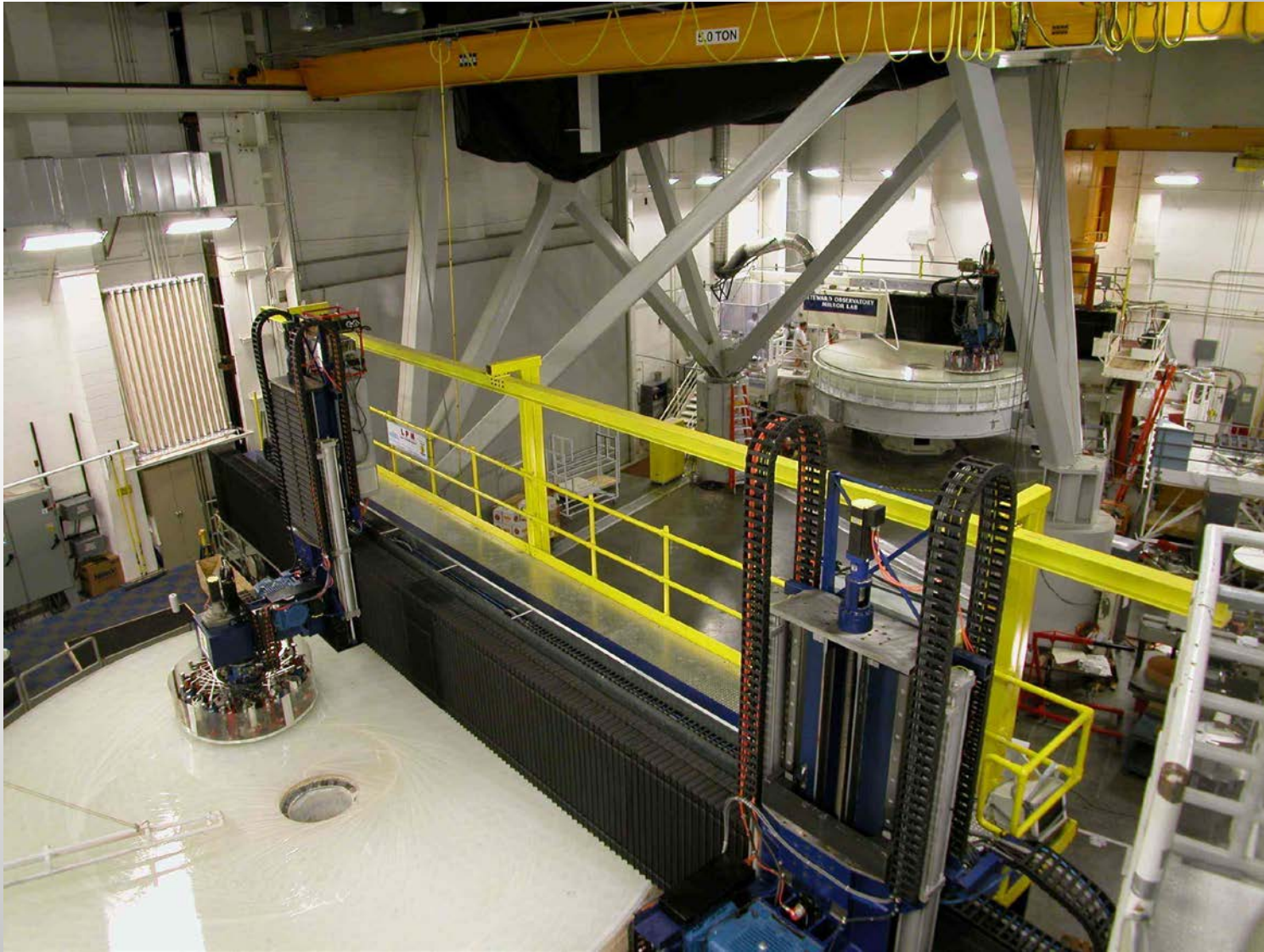
This picture of the NW side of Steward Observatory was taken in Sept. 1984 upon completion of the “U-shaped” addition.

Steward Observatory Through the Years



Steward Observatory as it appeared from 1984 – 1991. Posing for this picture is one of the theoretical astrophysicists who have graced the Steward Faculty over the years: Prof. Simon D. M. White. He is currently the Director of the Max-Planck-Institut für Astrophysik in Garching bei München, Germany.

Steward Observatory Through the Years



1985 saw the construction of the Steward Obs. Mirror Lab beneath the E grandstand of Arizona Stadium.

Steward Observatory Through the Years

The Steward Mirror Lab is the brainchild of Prof. Roger Angel.

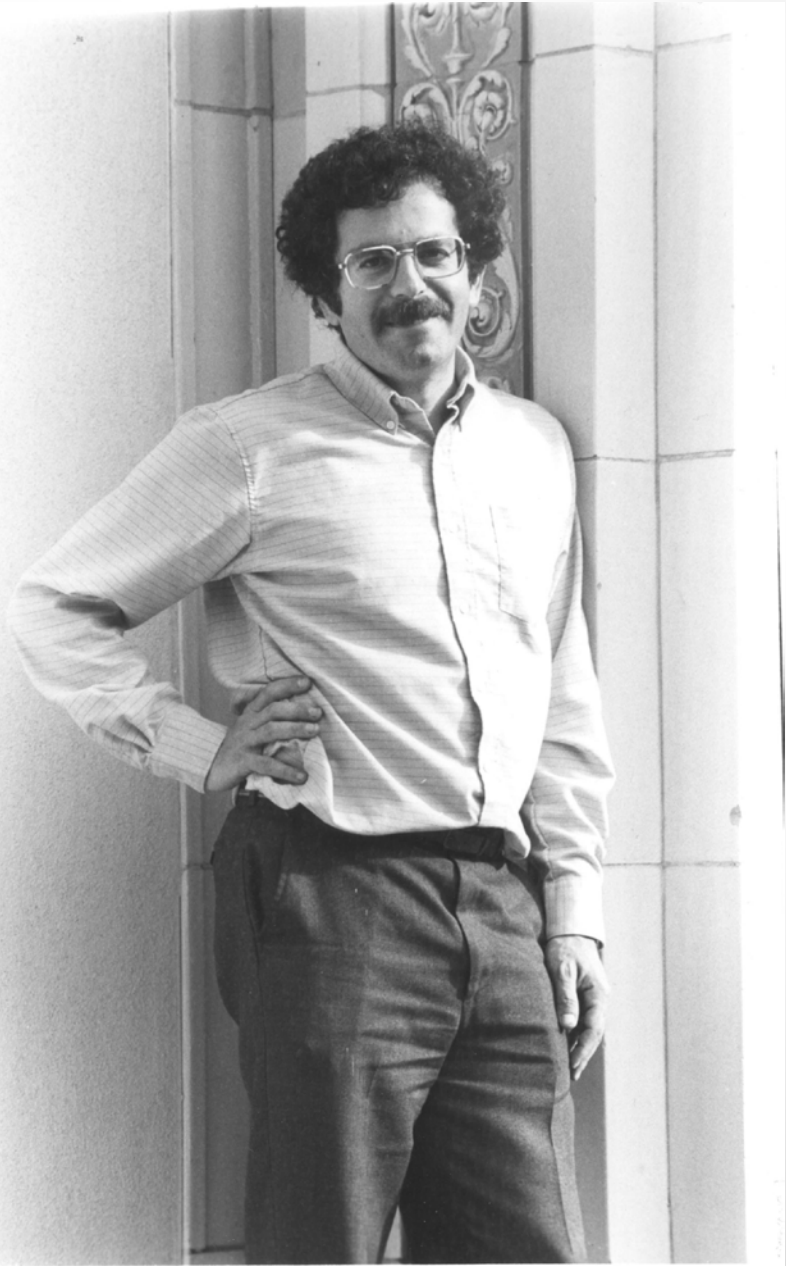


Steward mirrors are in these telescopes:



- VATT, Mt. Graham (1.8-m)
- SAO, Mt. Hopkins (1.2-m)
- ARC, Apache Point (3.5-m)
- WIYN, Kitt Peak (3.5-m)
- MMT, Mt. Hopkins (6.5-m)
- Magellan 1, Las Campanas (6.5-m)
- Magellan 2, Las Campanas (6.5-m)
- LBT, Mt. Graham, (2 x 8.4-m)
- LSST segments

Steward Observatory Through the Years



Prof. Marc Aaronson, a rising star in the astronomical community, was lost on April 30, 1987 in a tragic accident on Kitt Peak.

The Aaronson Memorial Lecture is held every 18 months.

Steward Observatory Through the Years

Two occupants of the “Chair of Peter” compare notes on the Mt Graham Observatory in September 1987.

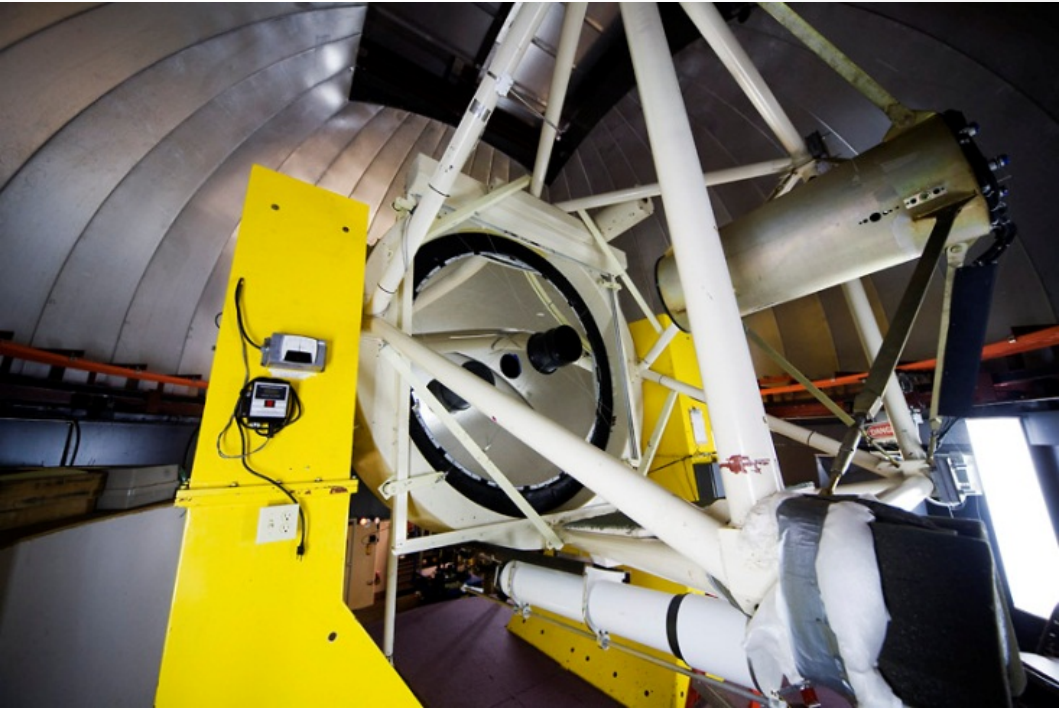


Steward Observatory Through the Years

Profs. Peter Strittmatter, Nick Woolf, Roger Angel, & George Coyne, S.J. explain the design of the Vatican Advanced Technology Telescope to His Holiness John Paul II in September 1987.



Steward Observatory Through the Years



The Vatican Advanced
Technology Telescope
(VATT) on Mt. Graham

This 1.8 m mirror was the first
of Roger Angel's so-called
"fast" (f1) mirrors.

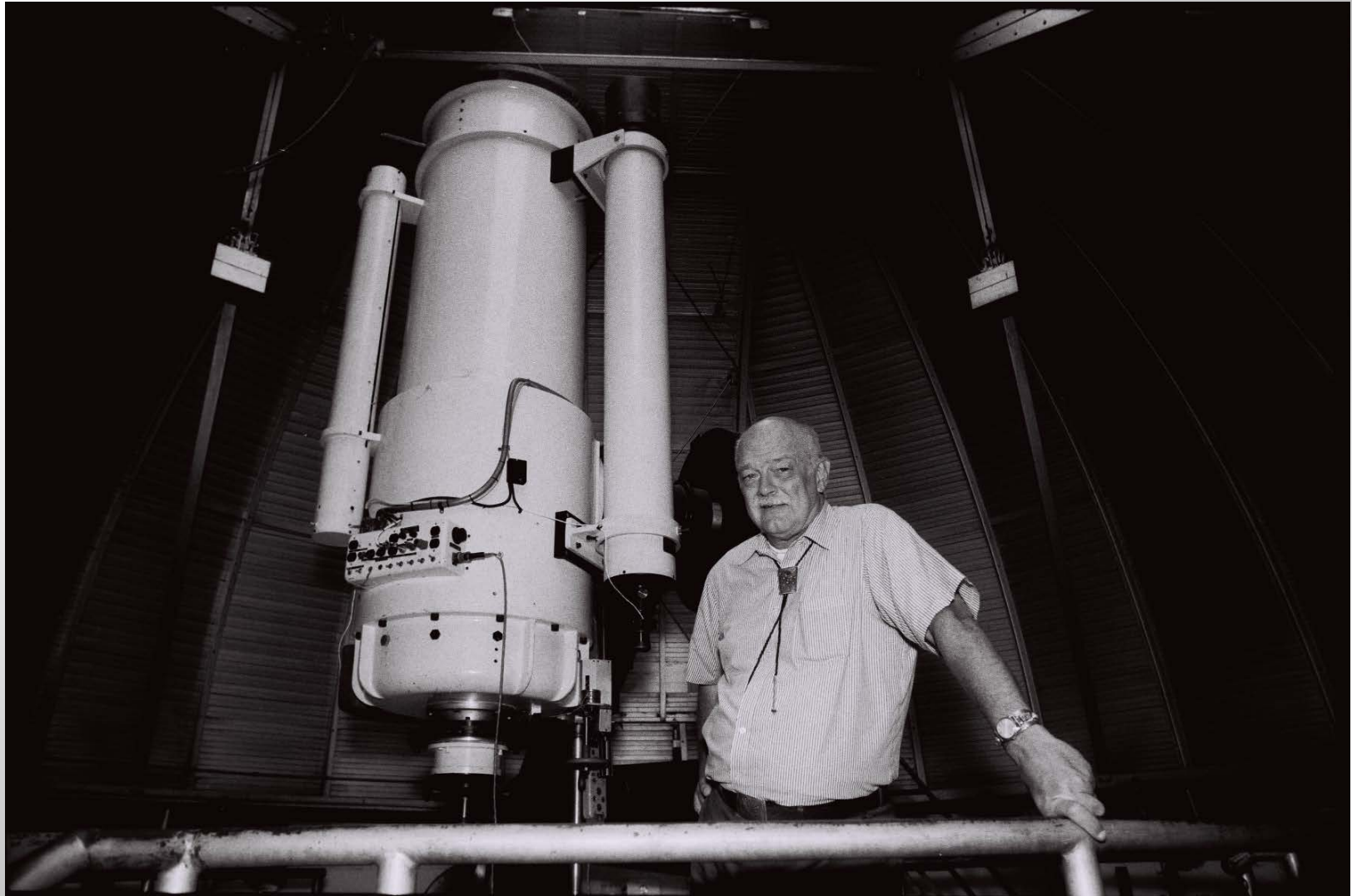


Steward Observatory Through the Years

In 1992, another addition to Steward Observatory was constructed.



Steward Observatory Through the Years

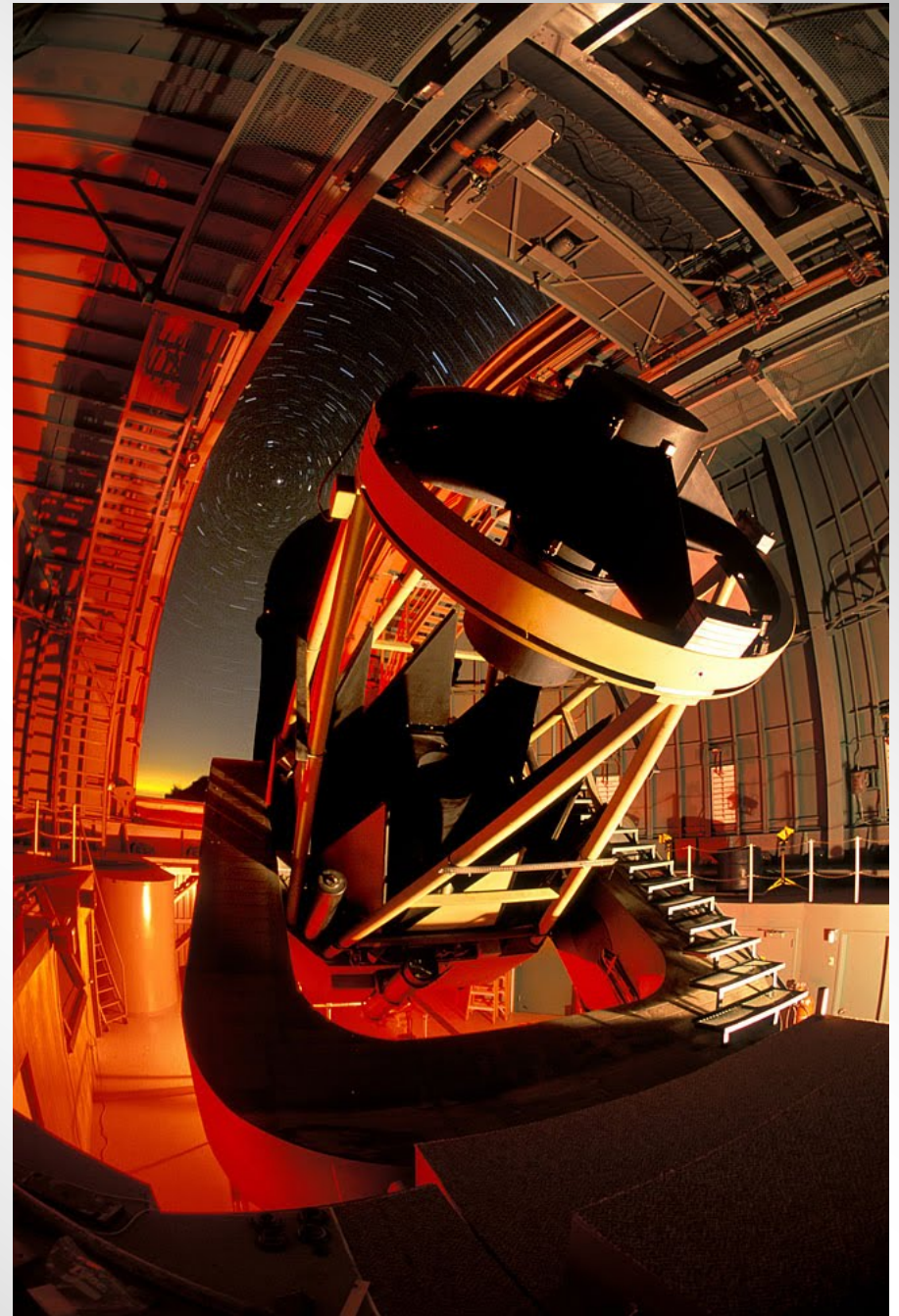


Prof. Raymond E. White, Jr. poses with the 21-inch telescope, which would later bear his name, in 1994.

Steward Observatory Through the Years

Peter Strittmatter led the observatory in finding ways to make efficient use of Steward's smaller telescopes in the "era of the 8-m Telescope."

The 2.3-m Bok Telescope on Kitt Peak was equipped with a prime focus, large format CCD camera called "90-Prime". This new instrument, used for wide-field imaging, greatly improved the scientific output of the Bok Telescope.



Steward Observatory Through the Years



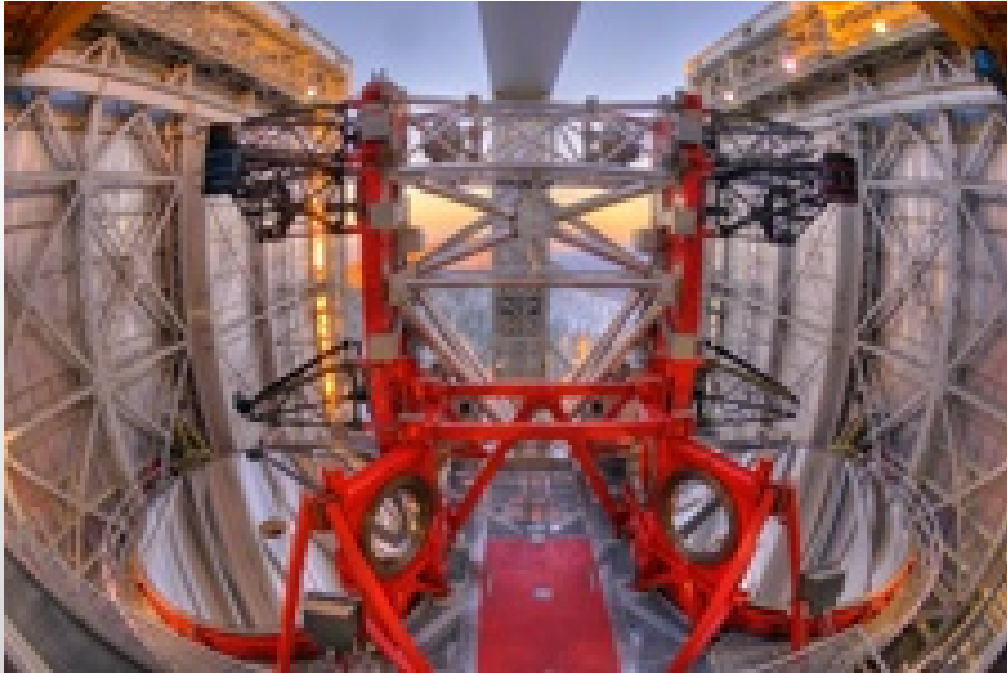
Heinrich Hertz Telescope, aka Sub-Millimeter Telescope on Mt. Graham.

Steward radio astronomers study star formation and astrochemistry in the Interstellar Medium.



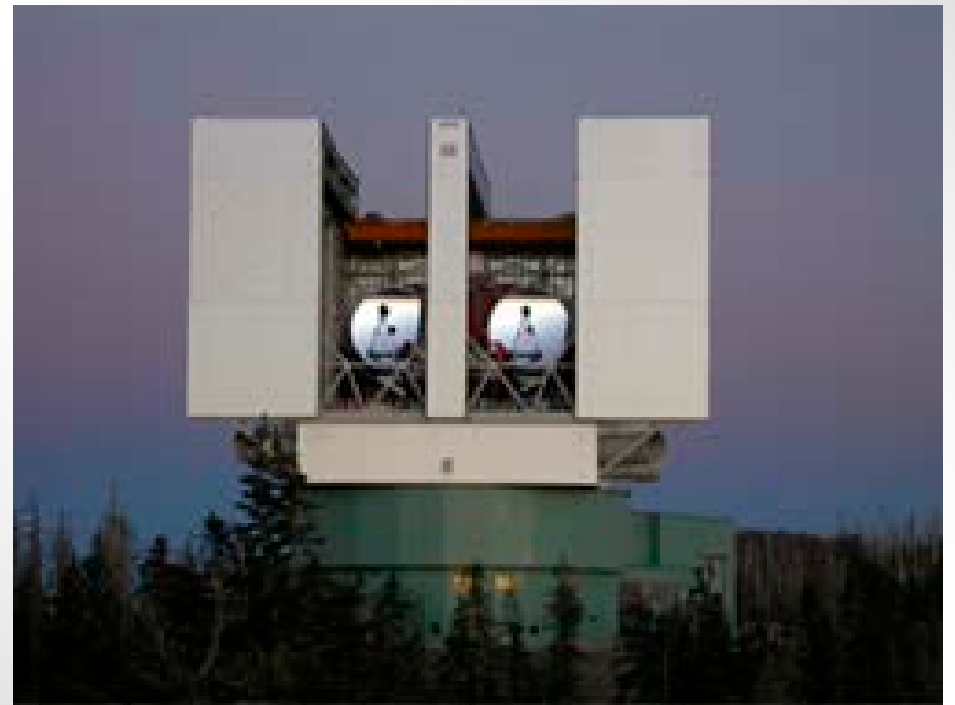
12m radio dish on Kitt Peak

Steward Observatory Through the Years



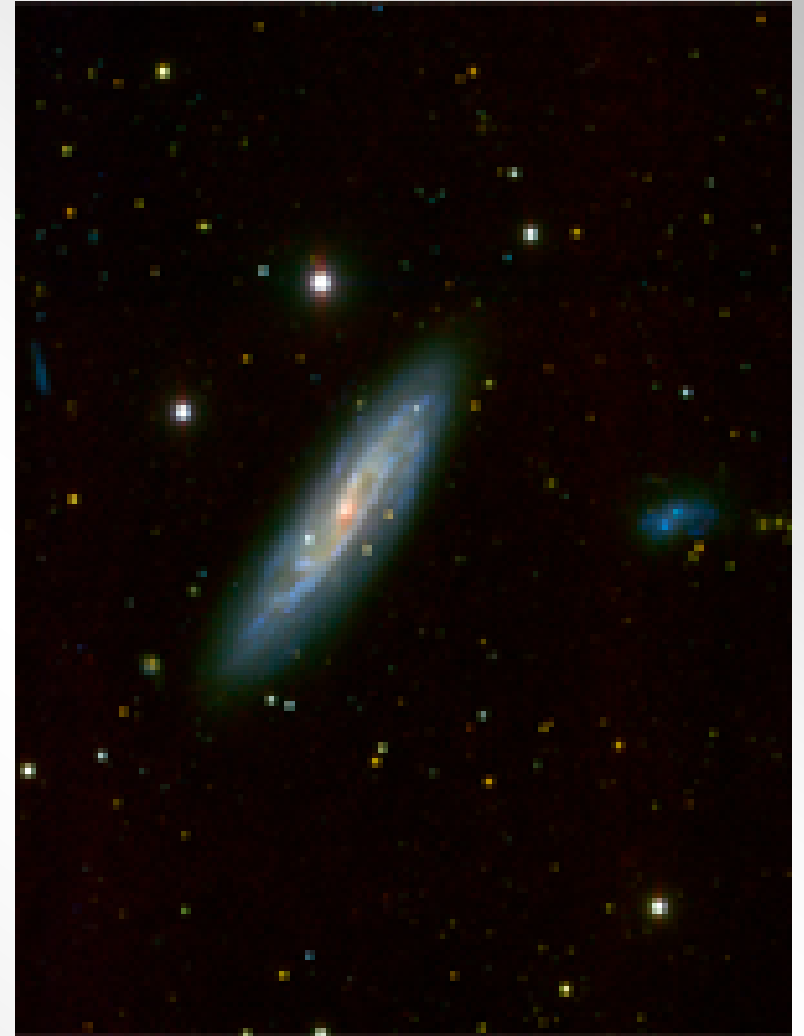
Large Binocular Telescope
Mt. Graham

2006



Steward Observatory Through the Years

The spiral galaxy NGC 2770: One of the first images taken by the LBT in “binocular” mode



Steward Observatory Through the Years



In 2006, Steward astronomers Doug Clowe (l) and Dennis Zaritsky (r) were part of a team that provided the first directed evidence for **Dark Matter**. The study involved data taken with the *Chandra X-ray*, *Hubble Space*, and *Magellan Telescopes*.

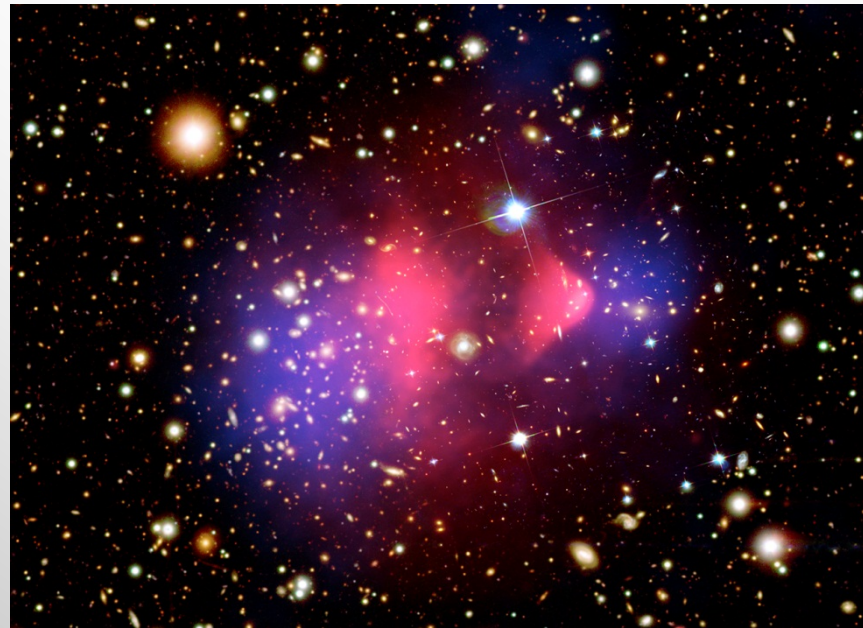


Image of Galaxy Cluster 1E0657-556 depicting optical, **X-ray**, and **gravitational lens mass**.

Steward Observatory Through the Years

October 4, 2011--Stockholm--

Nobel Prize in Physics awarded to Brian Schmidt, Adam Riess, and Saul Perlmutter for discovery of the accelerating Universe.

Brian Schmidt is U of A class of 1989 B.S. in Astronomy & Physics; Ph.D. Harvard 1993

now at Mt. Stromlo/Siding Spring Obs., Australia



Peter Strittmatter served as Director of Steward Observatory from 1975 – 2012 (37 years), the longest-serving department head on the UA campus.



Steward Observatory Through the Years

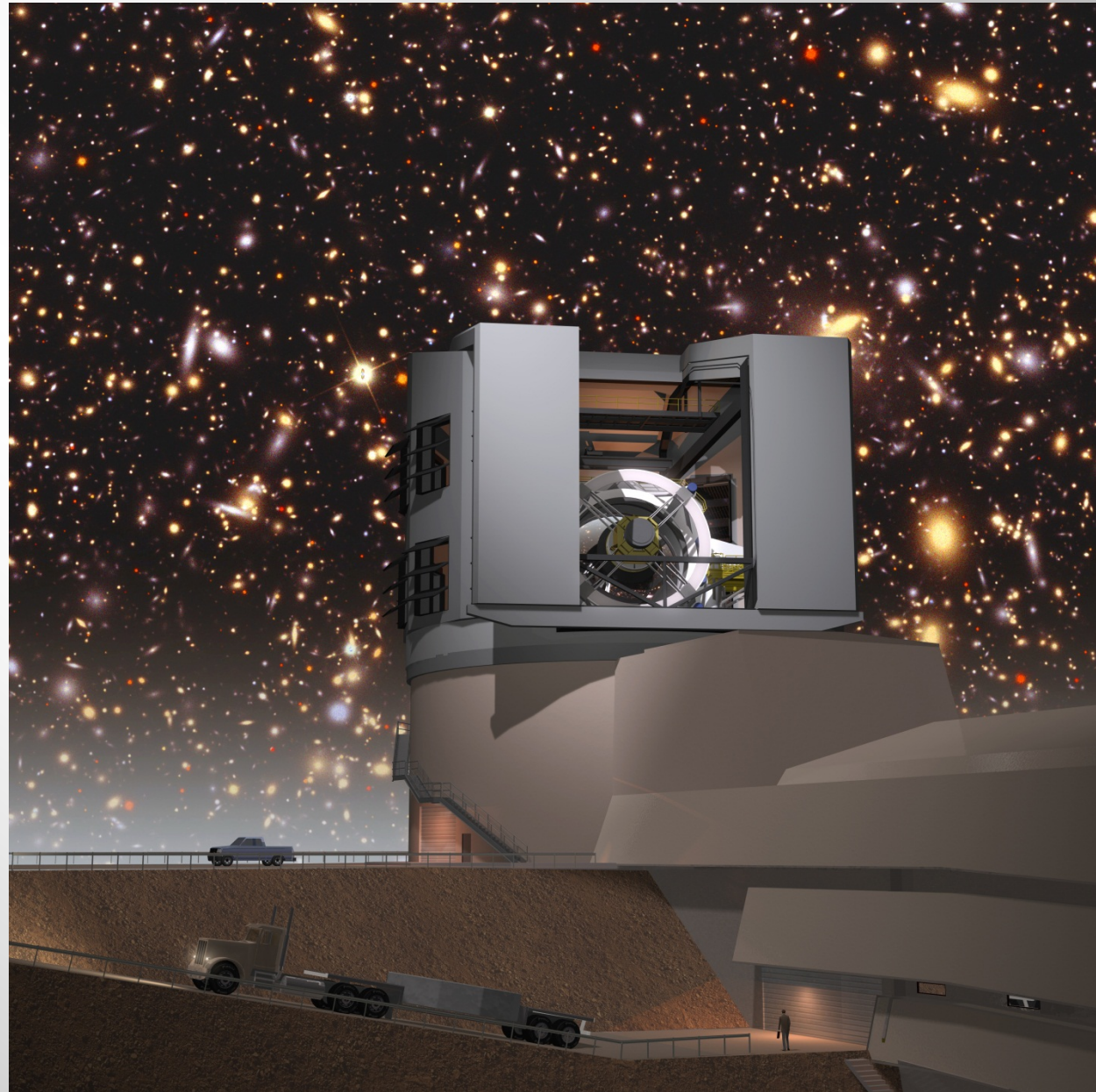


Buell Jannuzi, a product of the Steward graduate program (Ph.D. 1990), became the 7th Director of Steward Observatory on May 21, 2012.

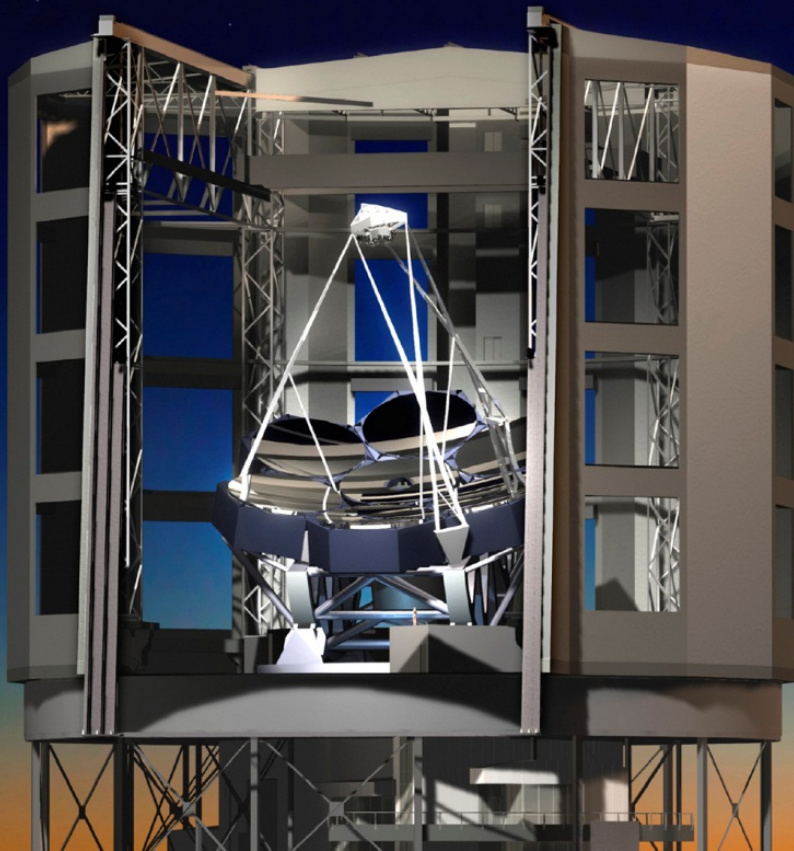
Steward Observatory Through the Years

The Steward Mirror Lab will cast the mirrors for the 8.4-m Large Synoptic Survey Telescope (LSST). All data from this telescope will be immediately available to the public.

Bill Gates has called the LSST “...the ultimate computer peripheral device.”



Steward Observatory Through the Years



Steward Observatory is participating in the 24.5-m Giant Magellan Telescope (GMT), which will be built on Cerro Las Campanas in Chile.