

The background of the slide features a semi-transparent image of a space shuttle launch. On the left, the white solid rocket boosters are visible, with blue and white plume patterns at the base. On the right, the orange external tank and white orbiter are shown in a vertical orientation, with a complex network of support struts and a yellowish glow around the base, suggesting the intense heat and light of a launch.

## NSF ACT OF 1950

**“AN ACT** to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes.”

# AMOS



Air Force Research Laboratory  
DETACHMENT 15

AIR FORCE MAUI OPTICAL & SUPERCOMPUTING SITE



# ***Advanced Electro-Optical System (AEOS)***



# ***Advanced Electro-Optical System Adaptive Optics***

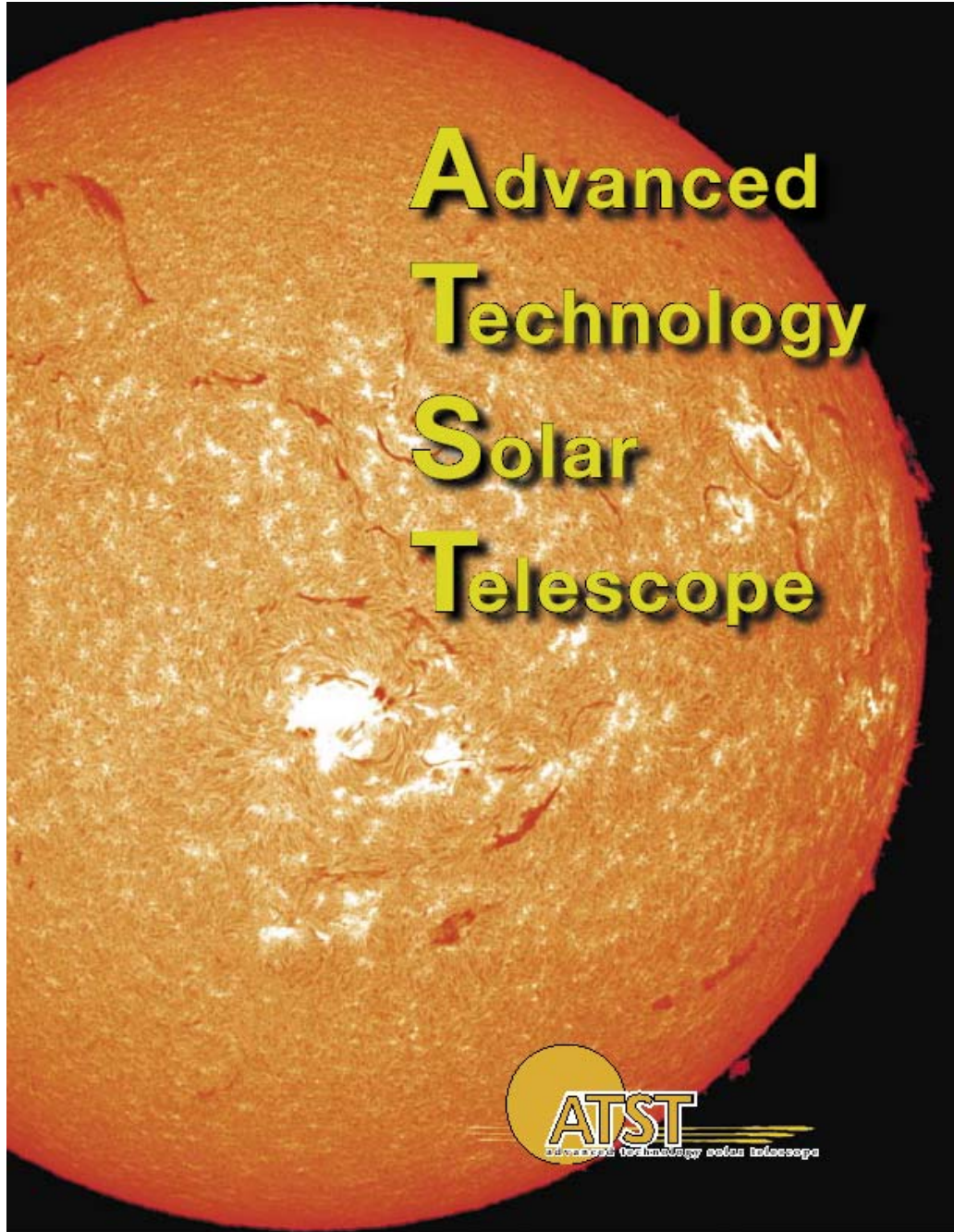








# Advanced Technology Solar Telescope



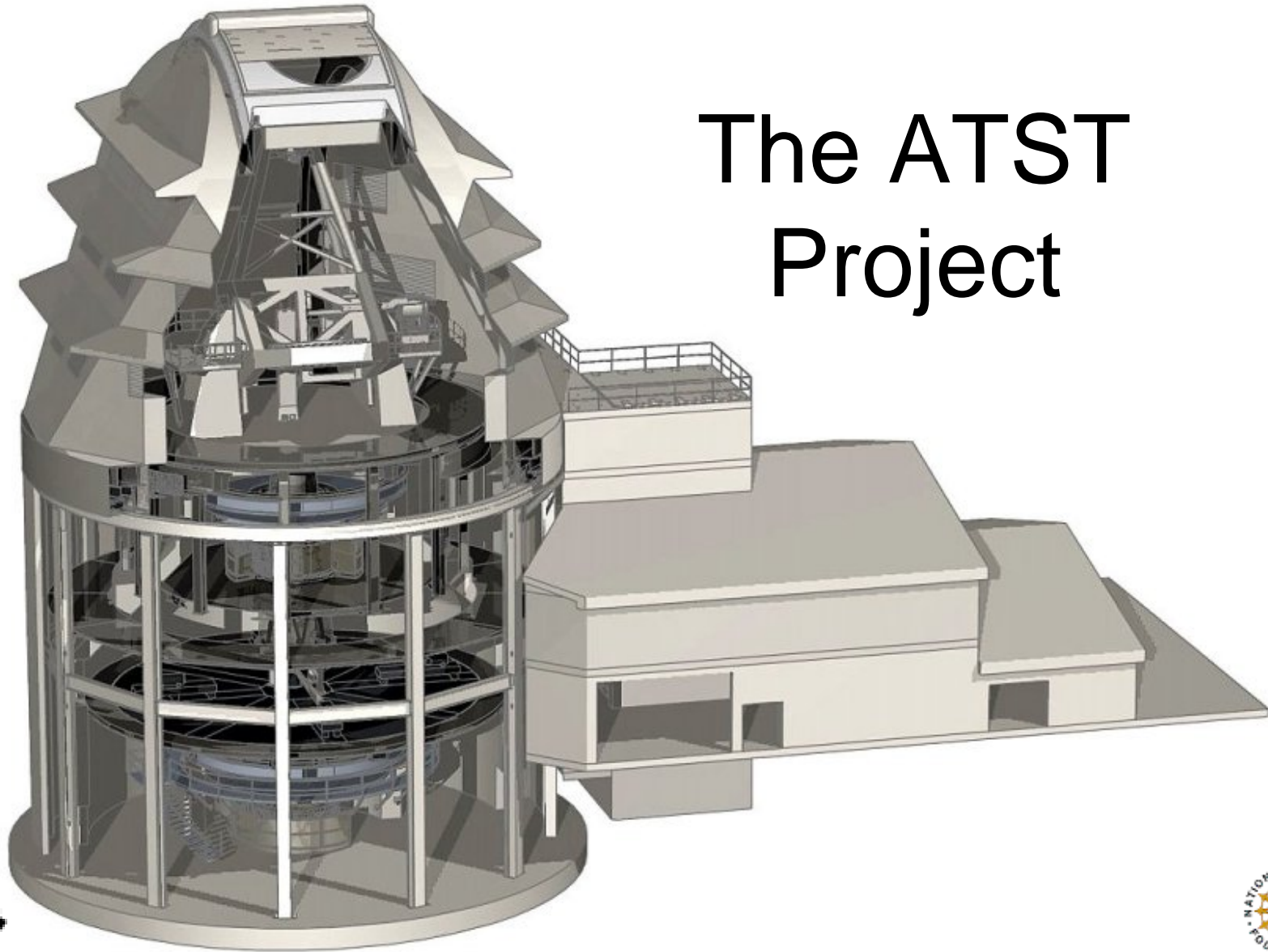


**Understanding** the nature of solar magnetism and activity crucially relates to many pressing scientific issues, ranging from **global climate change** through the **safety of astronauts** in space to the basic **physics of plasma magnetohydrodynamics.**



# *The Advanced Technology Solar Telescope*

## The ATST Project







**Air Force Research Laboratory**



**The University of Rochester,  
Dept of Physics and Astronomy**



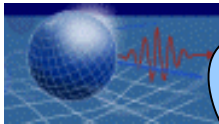
**California Institute of Technology,  
Laboratories of Applied Physics**



**Cal State University at Northridge,  
Dept. of Physics and Astronomy**



**Michigan State University, Dept of  
Physics and Astronomy**



**Stanford University, W.W, Hansen  
Experimental Physics Laboratory**



**Montana State University, Dept of  
Physics**



**University of Colorado, Center for  
Astrophysics and Space Astronomy  
And Joint Institute for Laboratory  
Astrophysics**



**UC, San Diego Center for  
Astrophysics & Space Sciences**



**Lockheed Martin, Solar and  
Astrophysics Laboratory**



**NASA Marshall Space Flight Center**

**NASA Goddard Space Flight  
Center**



**University of California, Los Angeles**



**Colorado Research Associates**



**Harvard-Smithsonian, Center for  
Astrophysics**



**Southwest Research Institute**



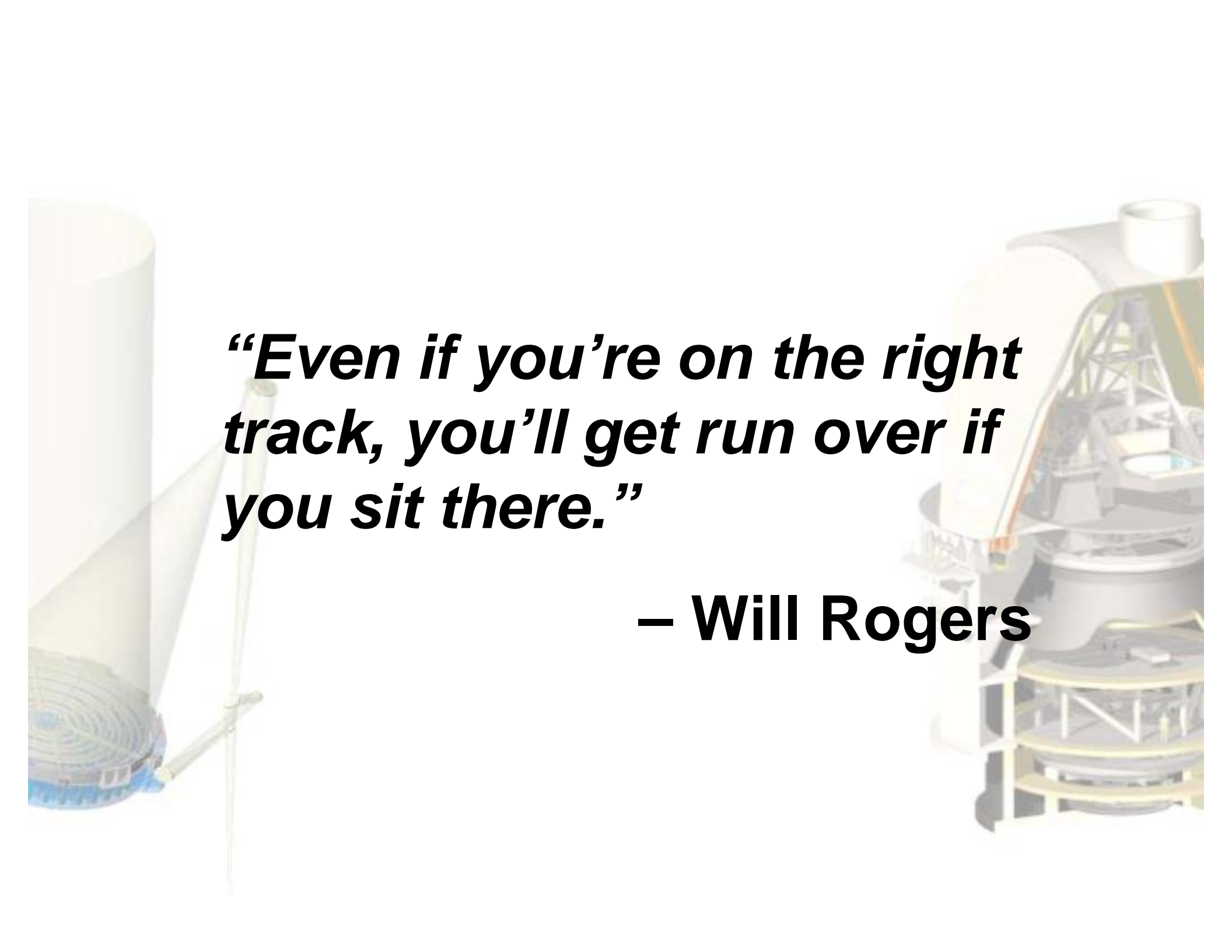
**Princeton University, Plasma  
Physics Laboratory**

**Collaborating Partner  
Institutions**



*ATST will be the world's flagship facility for ground-based solar physics observation and the first large US solar telescope constructed in the past 30 years.*





***“Even if you’re on the right track, you’ll get run over if you sit there.”***

**– Will Rogers**