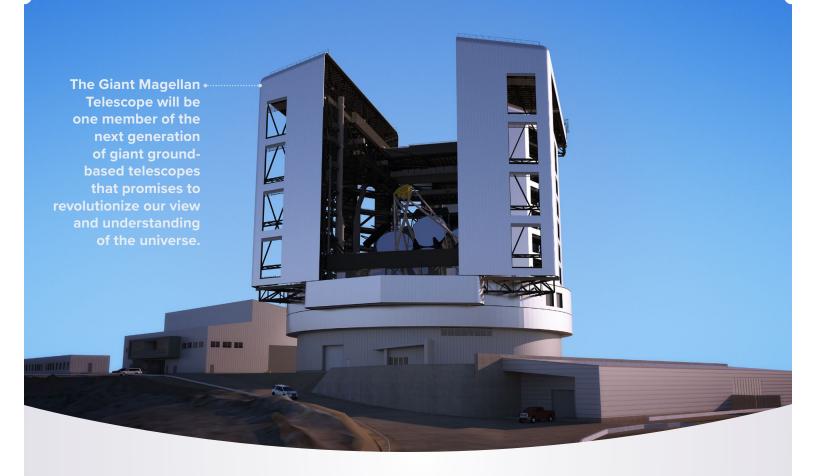
GIANT MAGELLAN TELESCOPE



SCIENCE GOALS

The GMT will have a resolving power 10 times greater than the Hubble Space Telescope. It will investigate: the origin and evolution of planetary systems, star formation, evolution of the chemical elements, black hole growth, dark matter and dark energy, formation and evolution of galaxies, first light and reionization.

LOCATION

Las Campanas Observatory, Chile

ELEVATION

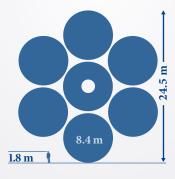
2,500 m

WAVELENGTH RANGE

Optical to infrared

FIRST LIGHT TARGET DATE

2029



GMT's primary mirrors are being fabricated at the Richard F. Caris Mirror Lab at the University of Arizona

EFFECTIVE DIAMETER FOR DIFFRACTION

24.5 meters

EACH MIRROR DIAMETER

8.4 meters

INSTRUMENTS

G-CLEF

Visible echelle spectrograph (PI: Andrew Szentgyorgyi, SAO/Harvard)

GMACS

Visible multi-object spectrograph (Co-PIs: Darren DePoy & Jennifer Marshall, Texas A&M)

GMTIFS

Near IR IFU and adaptive optics imager (PI: Rob Sharp, ANU)

GMTNIRS

Infrared echelle spectrograph (PI: Dan Jaffe, UT Austin)

MANIFEST

Facility fiber optics positioner (PI: Jon Lawrence, AAO)





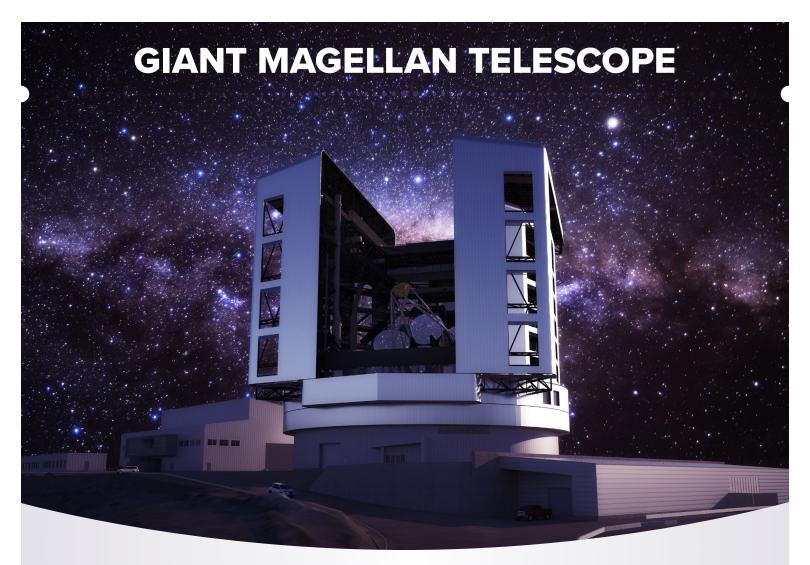












FOUNDER INSTITUTIONS

The GMT project is an international consortium of leading universities and scientific institutions:

Arizona State University • Astronomy Australia Ltd • Australian National University • Carnegie Institution for Science FAPESP – São Paulo Research Foundation • Harvard University • Korea Astronomy and Space Science Institute Smithsonian Institution • Texas A&M University • The University of Texas at Austin University of Arizona • University of Chicago

