



**Monday
April 25 2016**

3 - 5 PM

CBIS Auditorium

- Half hour reception with refreshments
- One-hour lecture with Carolyn Porter
- Open forum, 4:30-5 for questions

Hosted by
The Rensselaer
Astrophysical
Society

Astronomy on the Cutting Edge: The Giant Magellan Telescope

When built in 2021, the Giant Magellan Telescope (GMT) will become the world's largest telescope and will provide opportunities designed to answer humanity's most important questions about its place in the universe. The GMT will seek clarity to the questions "What are Dark Matter and Dark Energy? Are we alone in the universe? Where do we come from?" It will create the clearest images of the far reaches of the universe. The telescope will stand over 22 stories tall and weigh 1,100 tons, yet the enormous machine will maneuver with the subtlety of the finest technology in order to see objects billions of light years from planet Earth.

The GMT mirrors will collect more light than any telescope ever built and the resolution will be the best ever achieved. This unprecedented light gathering ability and resolution will help with many other critical questions vital to 21st century science. How did the first galaxies form? What are dark matter and dark energy that comprise

most of our universe? How did stellar matter from the Big Bang congeal into what we see today? What is the fate of the universe?

GMT is also creating an innovative funding structure that functions as the first of its kind for large-scale international big science endeavors. Private philanthropy is being engaged in innovative ways that allow philanthropists to connect directly with engineers, physicists, astronomers and planetary experts. In this talk we will discuss design specifics, science goals, opportunities for discovery and aspects of this project that makes it unique among the next generation of big science projects worldwide...more at www.gmto.org

**SPEAKERS
FORUM**

mullaa@rpi.edu

Take Down April 26



Rensselaer