

Meeting Announcement

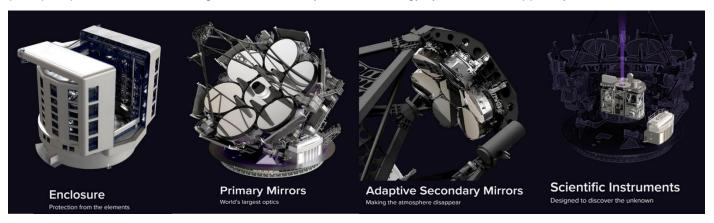
Wednesday February 8, 2023

OSSC Combined In-Person and Online Event "Overview and Status of the Giant Magellan Telescope"

Breann Sitarski, Ph.D., GMTO

Abstract:

The current generation of space- and ground-based observatories have revolutionized our understanding of the universe: they have allowed us to peer further back in time than ever before, probe the chemical composition of atmospheres around extrasolar planets, watch stars get tidally disrupted by supermassive black holes, etc. The next generation of ground-based observatories are extremely large telescopes that will allow us to further push the boundaries of our recent discoveries with their increased sensitivity and angular resolution. I will discuss one of these engineering marvels, the Giant Magellan Telescope, and give an overview of its various subsystems, including its principle optics, wavefront sensing and control subsystems, metrology systems, and support systems.



About Our Speaker:

Breann Sitarski is an optical systems scientist at the Giant Magellan Telescope Organization where she leads compliance analysis for all performance requirements at the observatory and subsystem levels and manages, maintains, and performs key analyses (optical and non-optical) for error budgets. She is also the technical lead for the Telescope Metrology System, a 3D truss that consists of a laser tracker network, an absolute distance-measuring interferometry truss, and primary mirror edge sensors. She received her B.S. (2010) and Ph.D. (2016) from UCLA in Astrophysics and Astronomy respectively and worked directly with Professors Andrea Ghez and Mark Morris on young star science in the Galactic Center and Adaptive Optics methodology.





OSSC Combined In-person and Online Event Feb. 8, 2023

Reception: 6:00pm Dinner: 7:00pm Presentation: 8:00pm Dinner - Members: \$35 Non-Members: \$40 Students: \$10

Late Fees of \$10, after 11:59 pm Feb. 3

No fee to attend the presentation in-person or online

Online Registration until Tue, Feb. 7, 2023

Register Here for In-Person or Online

Venue: <u>Creveling Student Lounge, Pasadena City College</u>
<u>Pasadena, CA 91106</u>