

# Physics Colloquium

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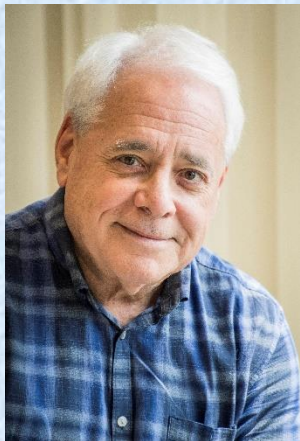
Monday, April 8, 2019 / Pupin Hall Theory Center, 8<sup>th</sup> Floor / 12:30 PM

Lunch will be available for attendees

## "The Thirty Meter Telescope: A Next Generation Optical/Infrared Giant Telescope and Perspectives on Global Projects, Impacts on Native Cultures and the US Extremely Large Telescope Program"

The Thirty Meter Telescope (TMT) will provide unprecedented light collection and diffraction-limited resolution for discovery class astronomy and exoplanet science. Using the filled-aperture, finely segmented primary mirror technology pioneered by the Keck telescopes, TMT will operate at first light with laser guidestar assisted multi-conjugate adaptive optics. TMT is being constructed by a global partnership of Canada, China, India, Japan, California Institute of Technology and the University of California. The preferred TMT location is on Mauna Kea in Hawaii, a superb site for optical/infrared astronomy. Native Hawaiian opposition to activities on Mauna Kea has delayed on-site construction of TMT but these challenges have been denied by the Hawaii Supreme Court. On-site construction is expected to commence

this year. TMT, together with the Giant Magellan Telescope to be constructed in Chile, and the US National Optical Astronomy Observatory is preparing a joint program, the US Extremely Large Telescope Program (USELTP) for consideration by the National Academy decadal survey of astronomy and astrophysics.



**Gary Sanders,**  
**Thirty Meter Telescope**