Meeting Announcement

October 13, 2021,

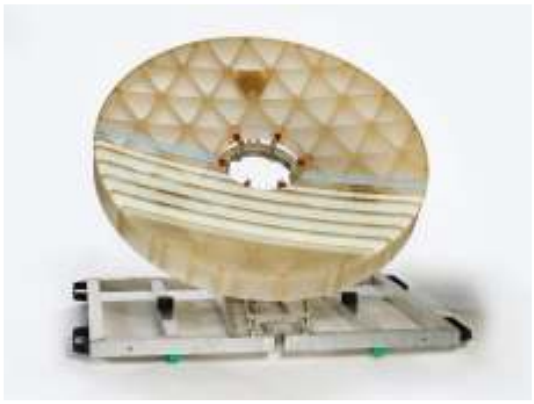
First OSSC Combination in-Person and Zoom

In-Person: Reception 6:00pm, Dinner 7:00pm, presentation 8:00 pm
Zoom Presentation Stars 7:30 pm

"Mirror Materials Selection: Space Mission Cost/Performance Impact"

Tony Hull, Professor, University of New Mexico

Meeting Registration and Agenda Details Below



Abstract: Cost and cost credibility now match performance in importance as criteria underlying most space mission architectures. This is especially true in the domain of optics and specifically optical telescope assemblies. Whether a large NASA or ESA Observatory or a constellation of Earth Observing or Communication Satellites, at earliest stages of development design-to-cost (DTC) now enters the process. When optical level dimensional stability is needed, material selection drives complexity, and as a corollary, cost and robustness.
Material selection also drives mass, though with advent of heavy lift launch vehicles, ultimate mass reduction is less important than in the past, though mass may still affect power and control stability. And mass remains a parameter in many parametric cost models used by evaluators. My experience is expressed spanning 40 years in selection of optical materials constituting a systems parameter for space applications. Lessons-learned are expressed with mirror materials from aluminum and beryllium to ULE and ZERODUR® and even CFRP.

About our speaker: Tony Hull was a Board Member of OSSC during several of his 24 years in Southern California while working at Perkin-Elmer (P-E), Optical Corporation of America (OCA) and Jet Propulsion Laboratory (JPL). Material optimization has consistently been one of his system's development considerations. He served as NASA's Technologist for Terrestrial Planet Finder Coronagraph. In Northern California, he became Director of Large Optics at Tinsley and Program Manager for the optical fabrication of the full suite of JWST beryllium mirrors. Presently Tony is Adjunct Professor of Physics and Astronomy at the University of New Mexico, continuing to support SCHOTT into a second decade of advancing lightweight ZERODUR® for critical spaceborne application.

Meeting Announcement

Mirror Materials Selection
Wednesday, October 13th, 2021
Dual in-Person and Online Meeting

Registration Opens Sept 27, 2021

In-person Dinner Registration until Oct 13:

1. In-Person Dinner:
Reception: 6:00; Dinner: 7:00; Talk: 8:00

- **In-Person Dinner Registration by Oct 8**: Members $35, Non-Members $40, Student Members $10 .
- **In-person Dinner Registration After Oct 8** Members $ 40, Non-Members $45, Student Members $20

2. In-Person without Dinner: No Charge

In-Person Location: Brea Civic Center
1 Civic Center Cir, Brea, CA 92821

Online Registration until October 12:

- **No charge**
- **Zoom Login Starts: 7:30pm**
- **Zoom link provided on day of meeting**
- **Students must login as member or non-member to register for online option.**

All Registrations at www.ossc.org

See below for Registration and venue location.