



GEOST

GEOST Capability Briefing for Amon-Hen

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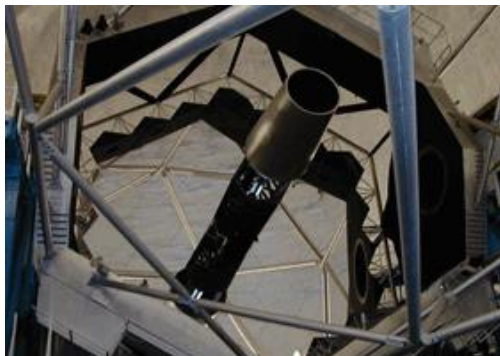
GEOST Overview

- Architect and develop a wide range of electro-optic (EO) sensor systems, hardware, and software
 - Specialize in Contract R&D
 - Taking TRL 1-3 to TRL 4-6
- High-Fidelity sensor simulation
- Products in Space Situational Awareness, Autonomous Observatories, and Photon Counting Detectors
- Headquarters in Tucson, Arizona
 - “Optics Valley”, Optical Sciences Center at University of Arizona
 - Office in Washington, DC
- Incorporated in 2004
- Core staff of 35 with multiple consulting engineers and scientists
- Facilities
 - 12,500 sq ft with offices, development laboratories, machine shop, clean room
 - Observatory production line
 - Simulation and analysis software and workstations



Experienced in

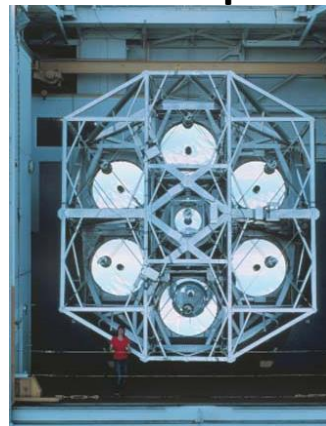
Adaptive Optics/Segmented Optics/Sparse Arrays/Interferometry



**W. M. Keck
Observatory**



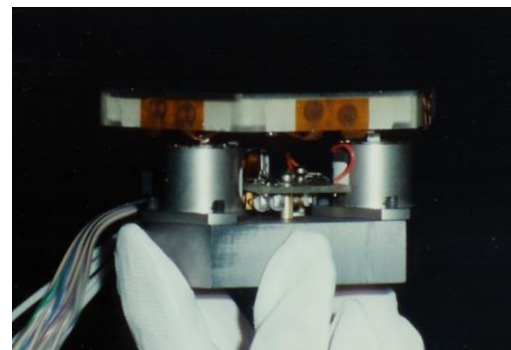
**Multiple Mirror
Telescope**



McMath Telescope AO



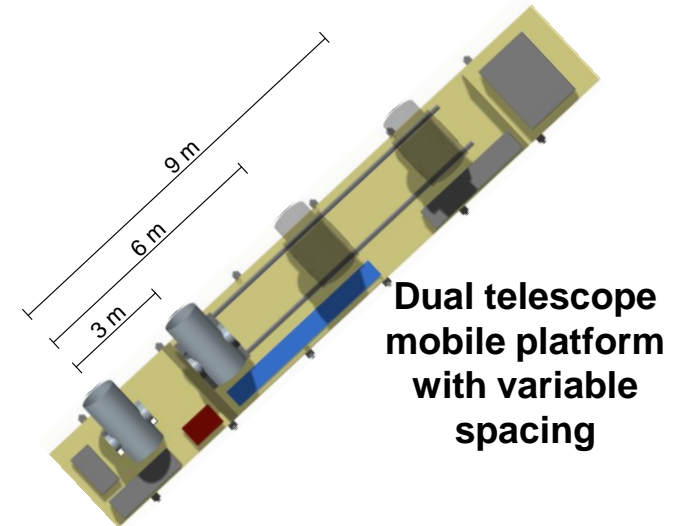
**Phased Array Mirror Extensible Large
Aperture (PAMELA)**



**PAMELA Segment with
Edge Sensors**

GEO Imaging Concepts (Galileo Proposal)

- **Dual 1-meter aperture mobile telescope system with variable spacing**
 - Provides <9 m baselines which fills low-frequency UV-plane components
 - Worked in concert with larger central telescope for similar GEO resolution
 - Spatial-Spectral Phase Closure concept creates a “hub” of correlated phase measurements that tie all measurements together
 - Improves UV plane coverage rate by 5x at short baselines and 2x at longer baselines – with minimal loss of UV coverage due to smaller diameter
- **Concept also resulted in “mini-Galileo”**
 - Stand-alone mobile system with 1 m GEO resolution



Dense “Hub” of UV-Plane Coverage

