



# Large Aperture Lightweight Space Based Optics



**Project Objectives:** To improve adaptive optics control techniques for flexible deployable space mirror surface and beam control and to minimize image aberrations.

## Research/Thesis Topics:

- Develop adaptive optics test bed and perform experiments
- Develop improved adaptive optics sensors
- Develop improved adaptive optics control techniques, such as Multi-input Multi-output techniques with robust control for flexible mirror surface control and minimized image aberrations
- Develop improved jitter control techniques
- Simultaneously optimize control loops, structure, and optical design

