



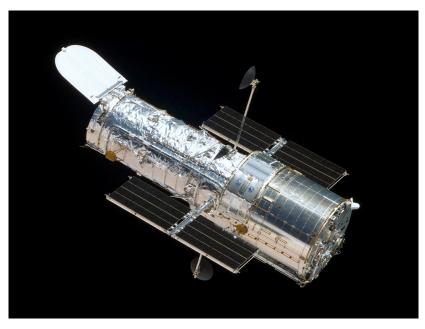


# Astraea

### Adam Schilperoort, Brandon Horner, Michael Partridge, Peter Kurtz, Trey Tangeman

Sponsor: Jim Clark, NRL

### **Innovations in Astrometry**



Hubble Space Telescope

#### Keck Observatory (Mauna Kea)



#### Kepler Space Telescope



### Navy Precision Optical Interferometer (NPOI)

- Highest precision optical interferometer in the world
- Equivalent to a 437 meter telescope
- Operational since 1992

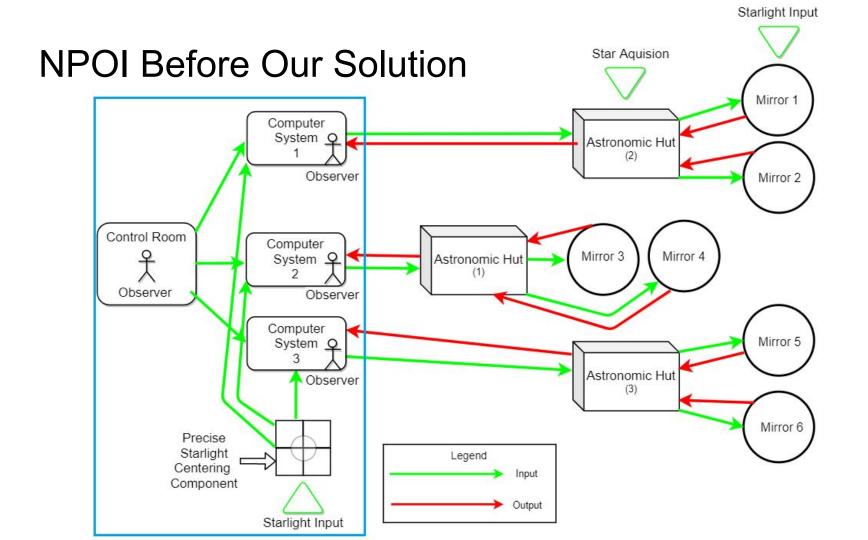


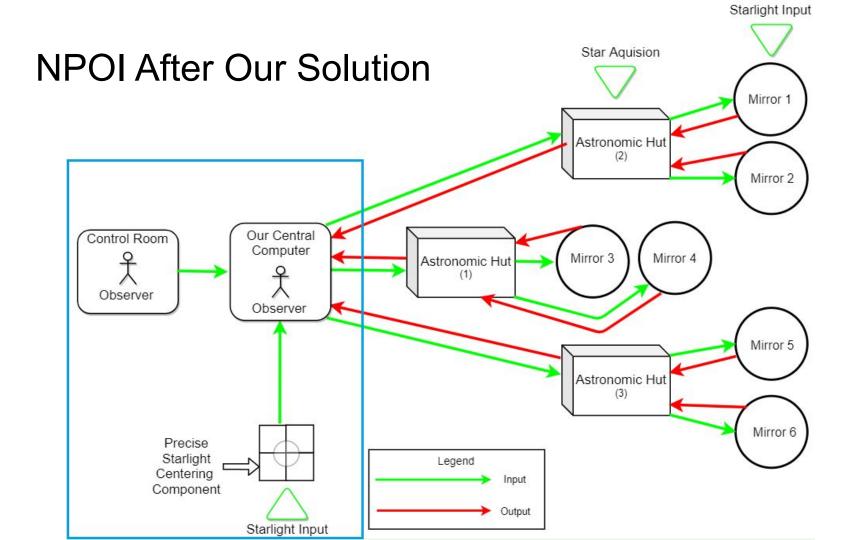
# **Technological Complexity**

- Hardware/Software as old as 30 years
- Unreliable mirror control system
- Often requires manual operation









## Plan for Development

- Weekly meetings with the client.
- Investigate the hardware options.
- Make sure our system is robust and maintainable.





# Summary

- Save NRL Time and Money by Fixing the Following:
  - Commands issued at each computer
  - Individual OS, maintenance costs up, complexity up
  - Excessive employee training
  - Expensive and hard to find parts
  - Downtime (annual operating cost: \$400,000)
- We are Team Astraea



