



The WFIRST Optical Design of the Phase-A Wide Field Channel

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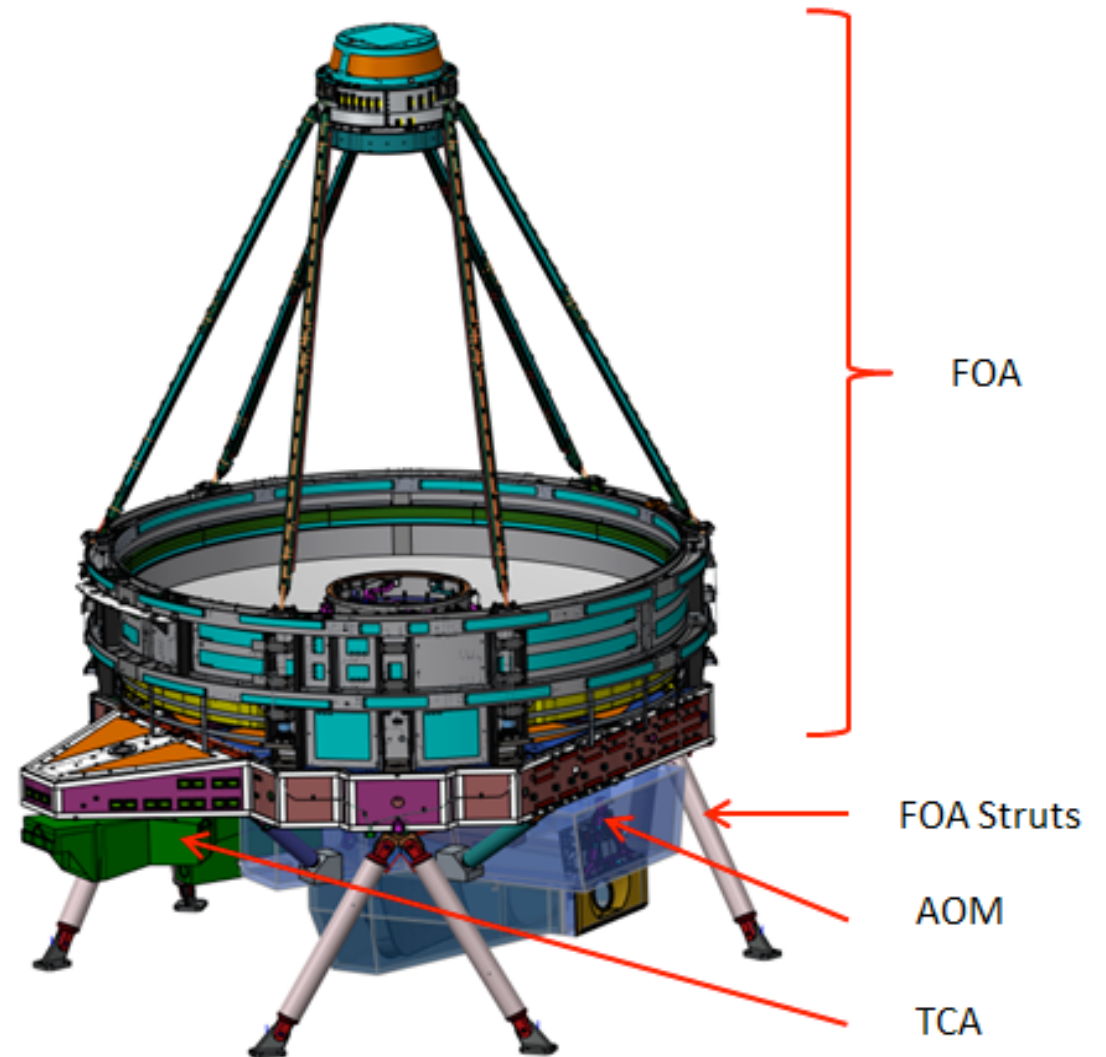
International Optical Design Conference

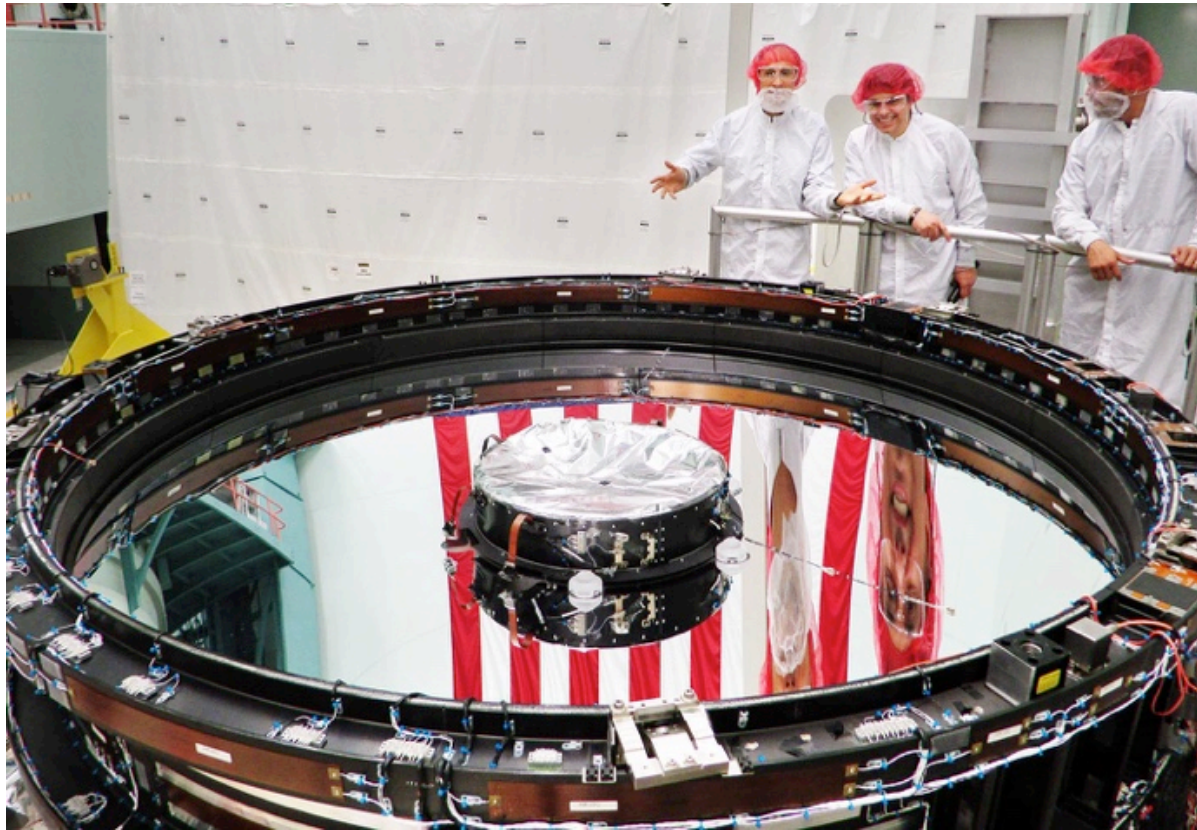
Denver, CO

- OVERVIEW
- SCIENCE
- OBSERVATORY PHASE-A ARCHITECTURE CHANGES
- WIDE FIELD CHANNEL OPTICAL LAYOUT
- PERFORMANCE
- INTEGRAL FIELD CHANNEL

WFIRST Imaging Optics Assembly (IOA)

- Observatory architecture revamped for Phase-A
- Aft Optics Module (AOM)
 - WFC Aft Optics
 - IFC Relay Optics
- CGI Tertiary Collimator Assembly (TCA)

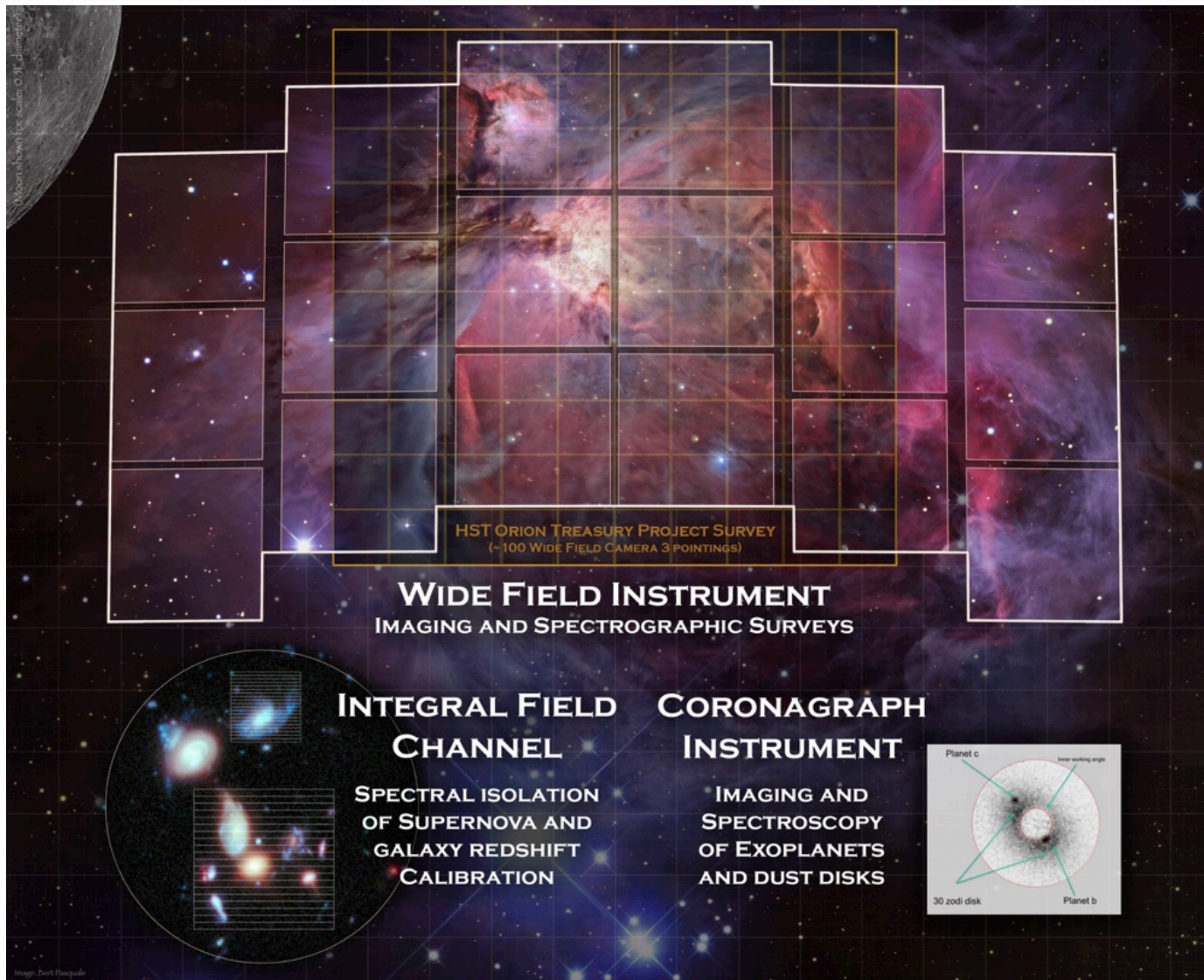






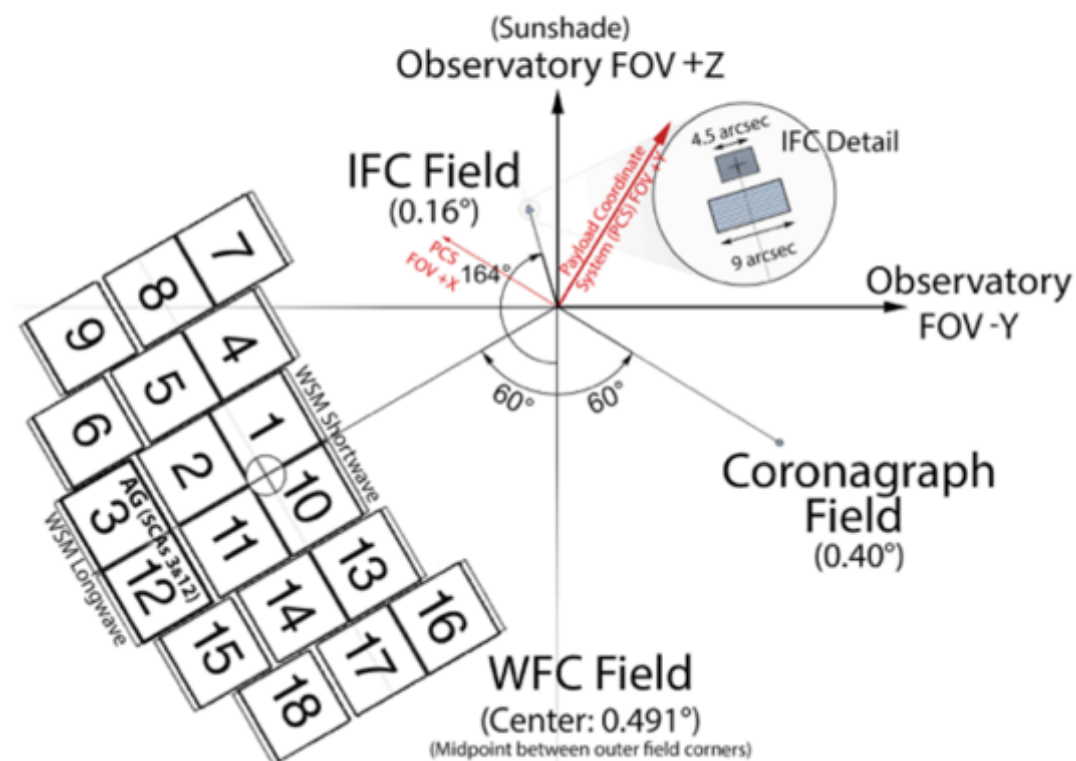
WFIRST
WIDE-FIELD INFRARED SURVEY TELESCOPE
ASTROPHYSICS • DARK ENERGY • EXOPLANETS

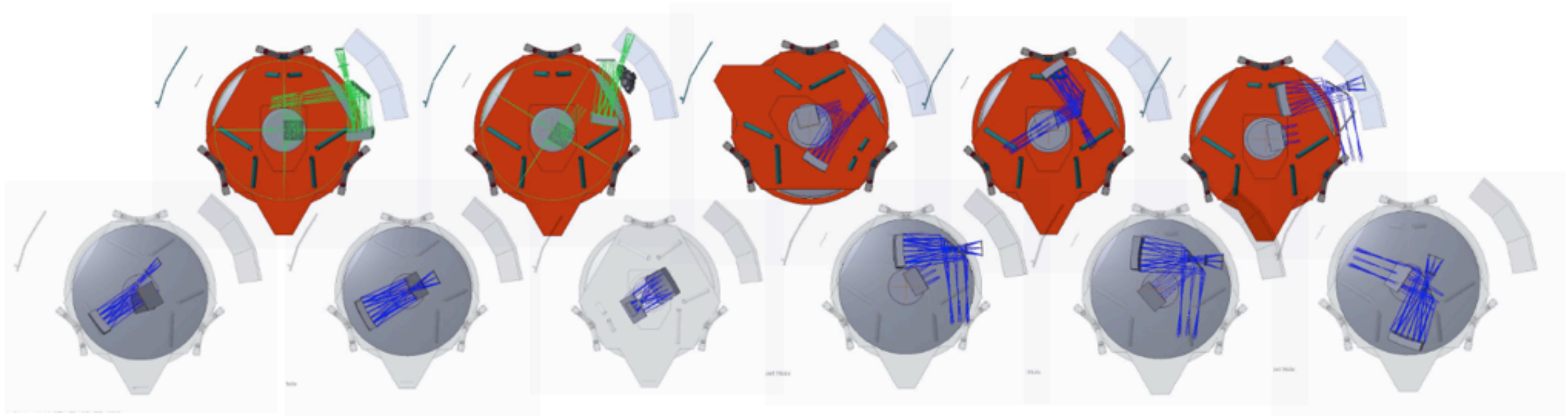
Science & FOV

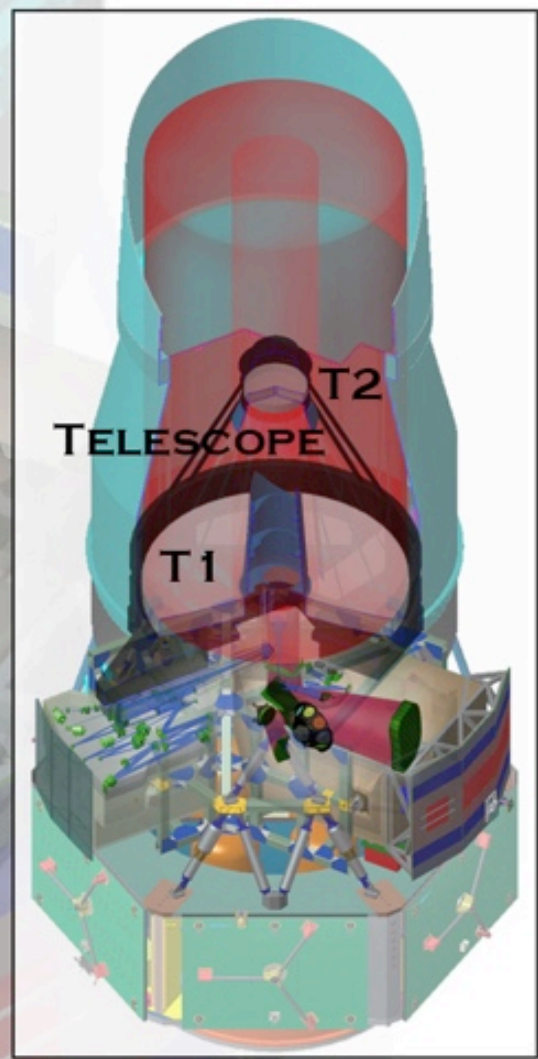
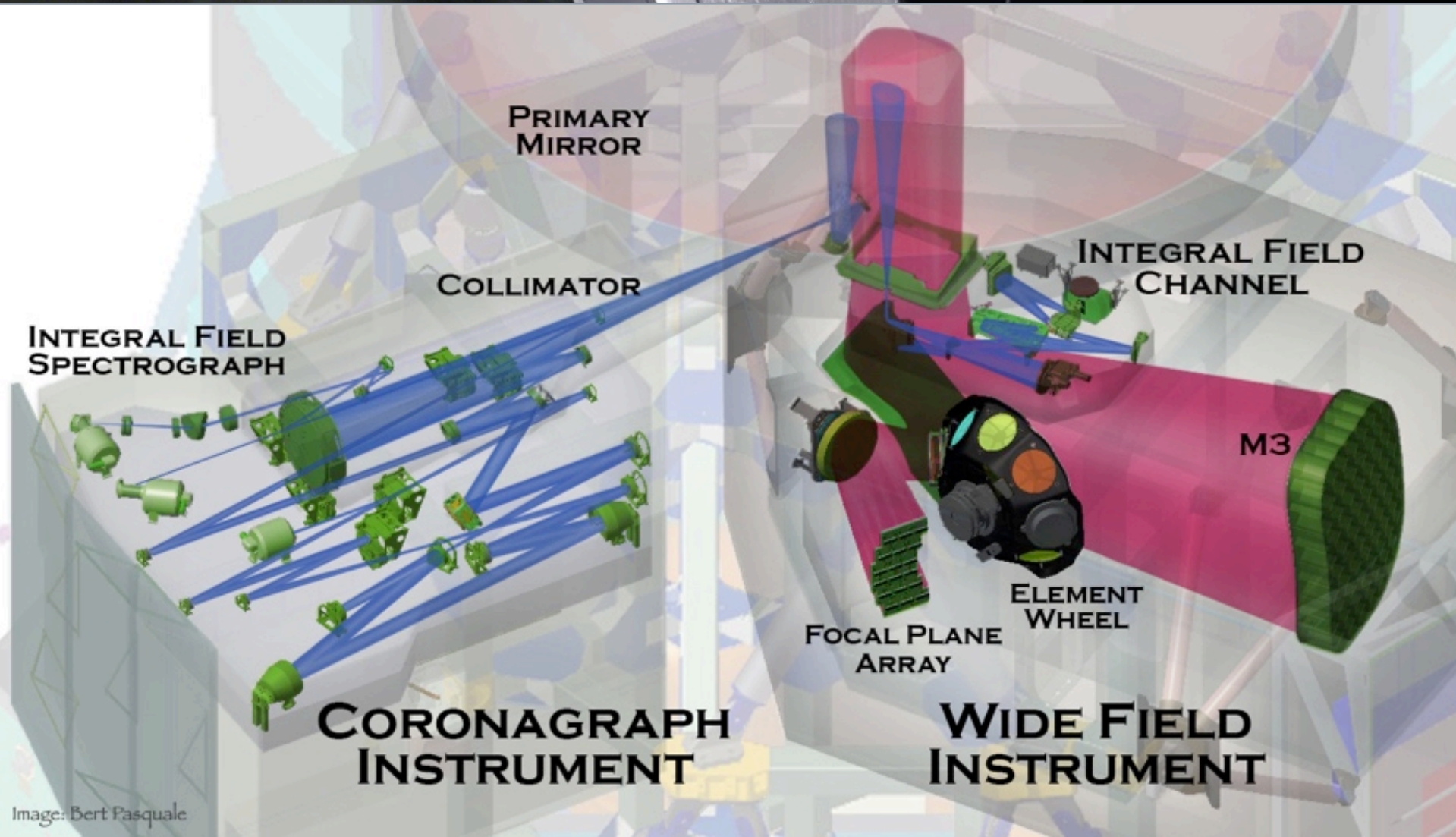


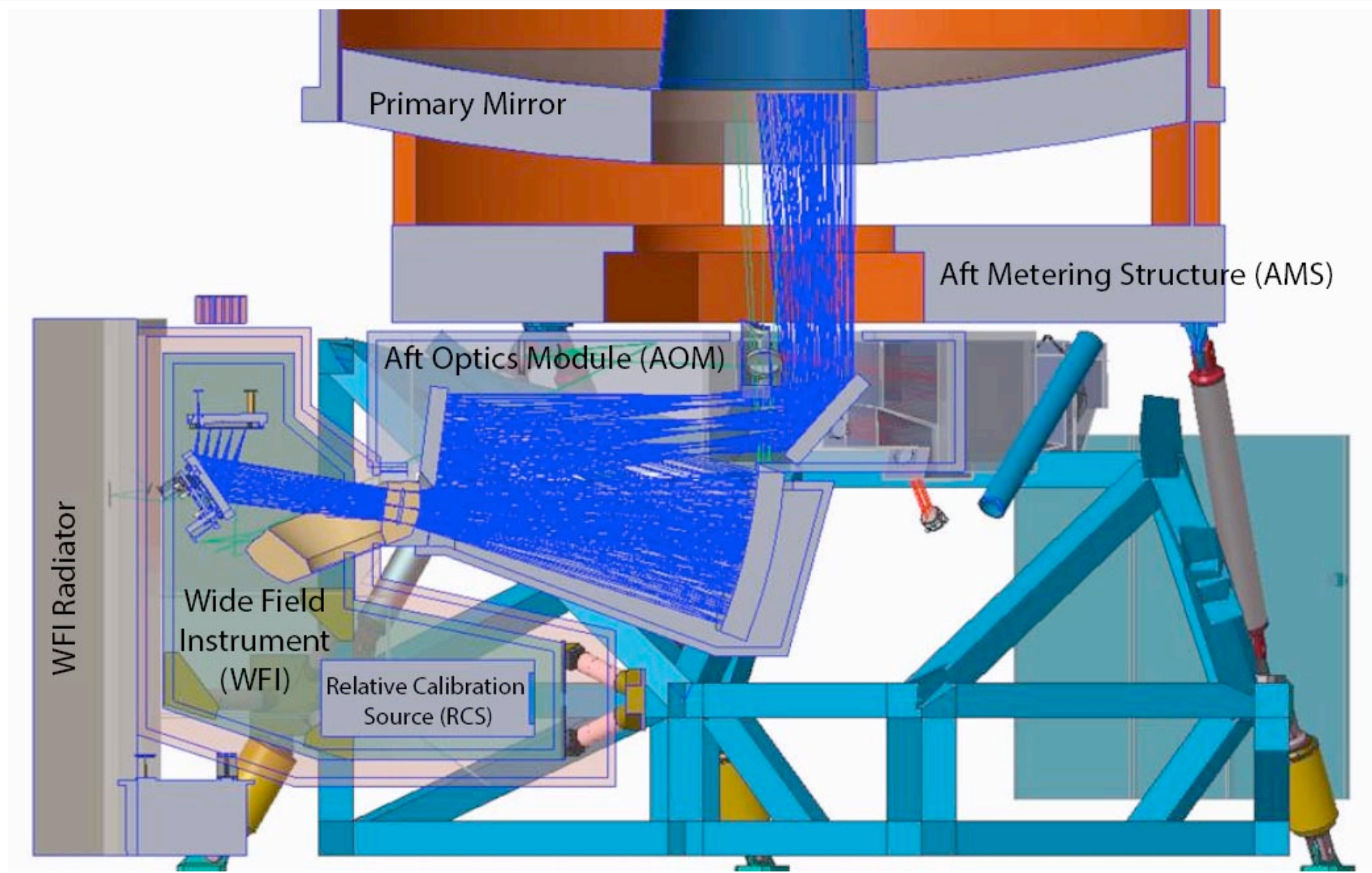
WFIRST Instrument Field of View Layout

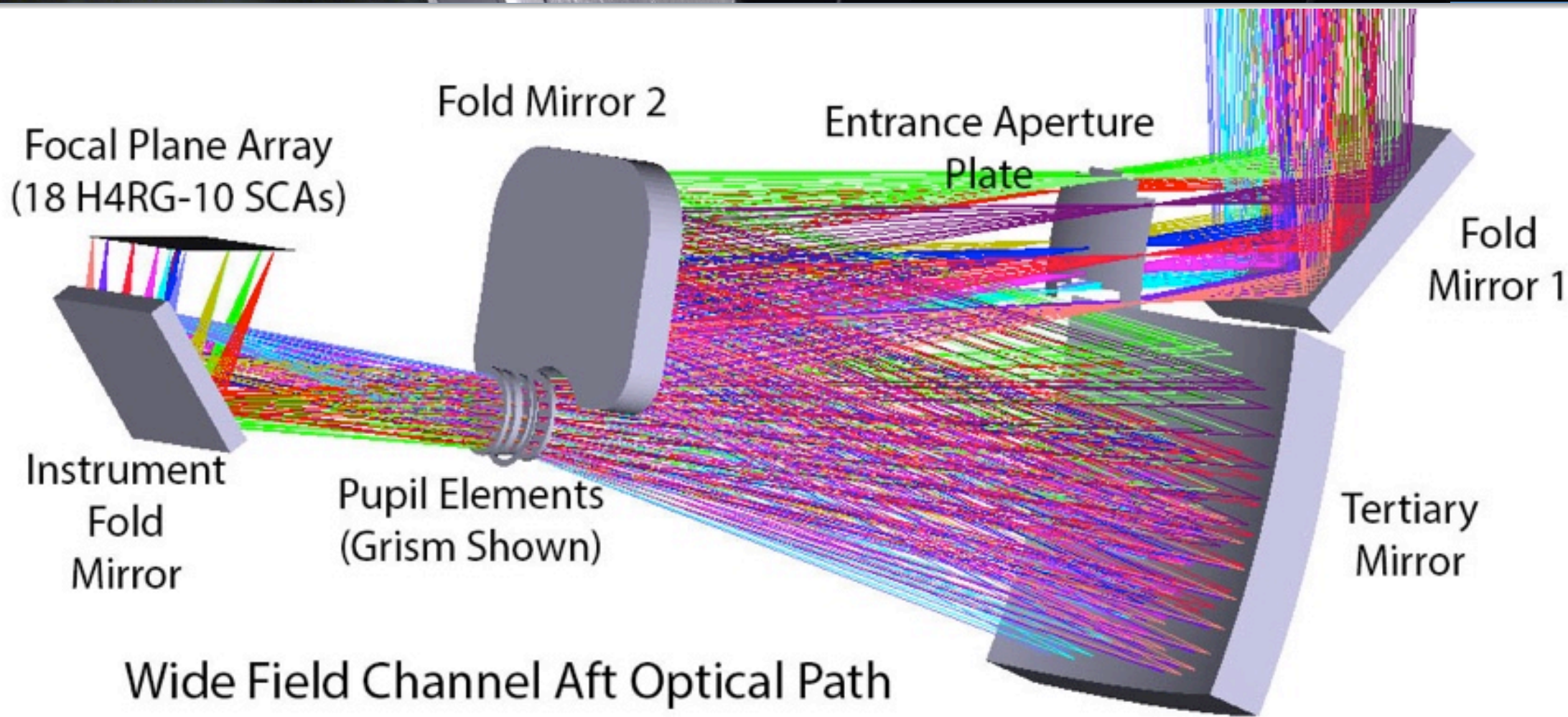
Sky Projection
Phase-A SRR Design (v.7.6.8)

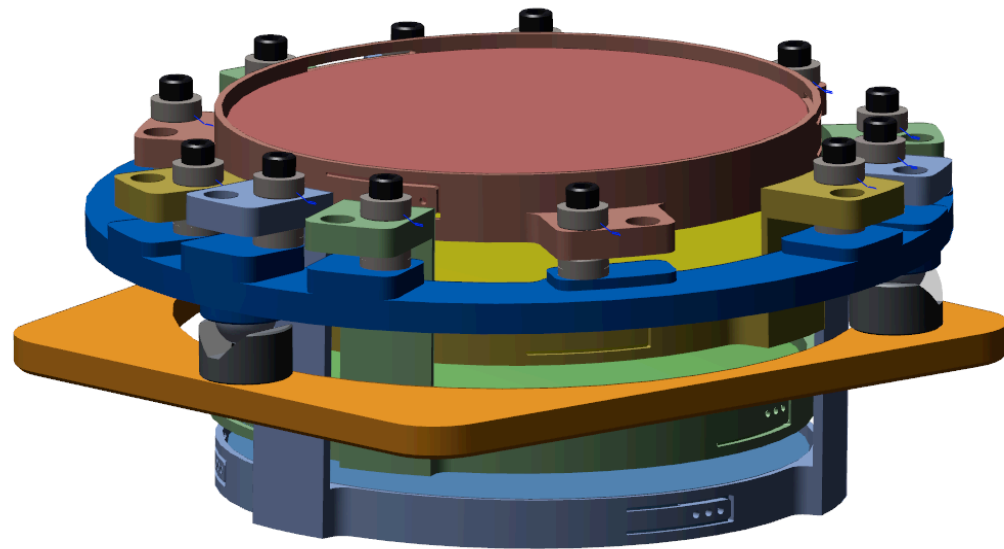
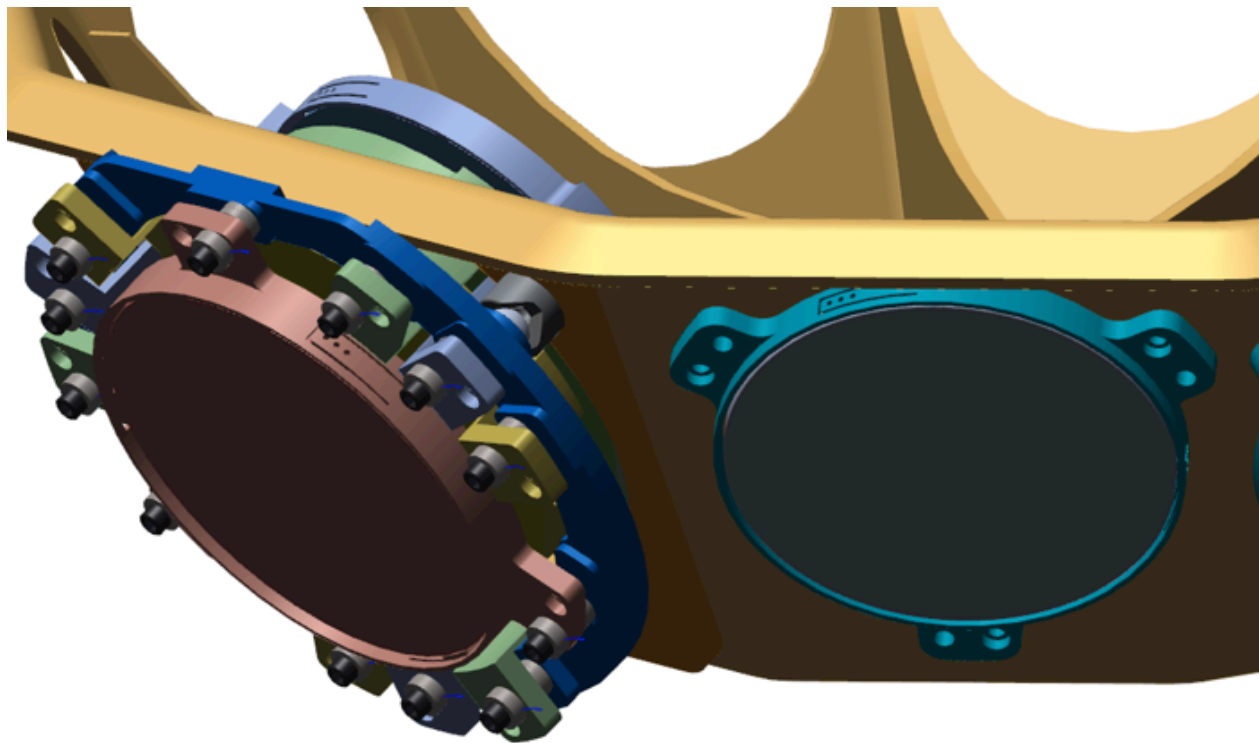


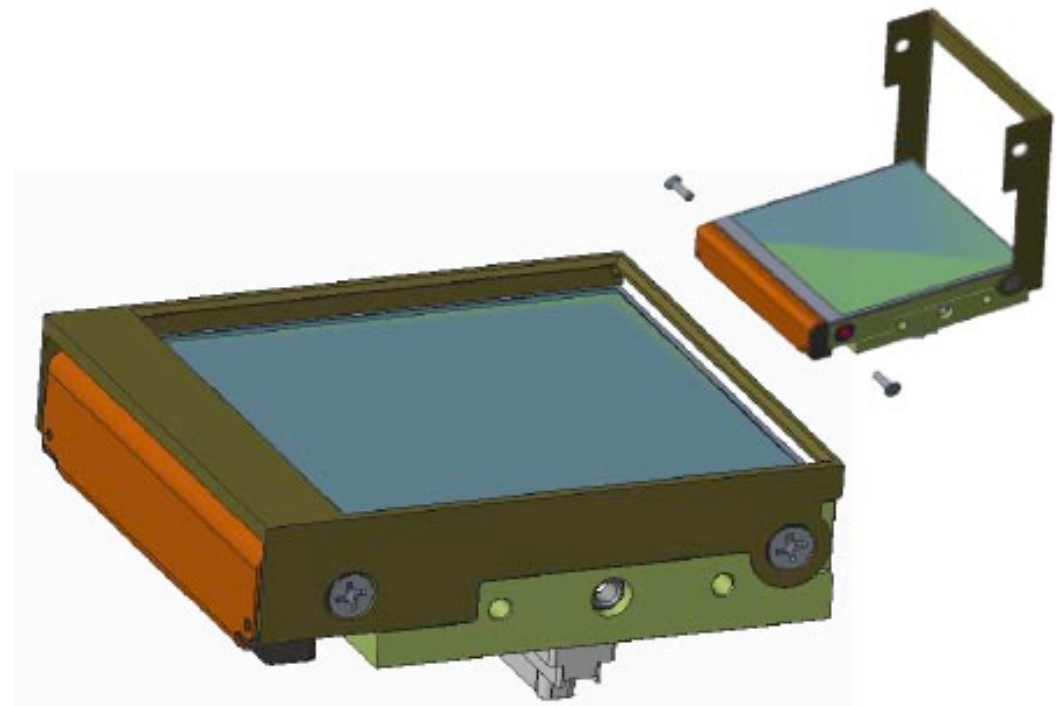
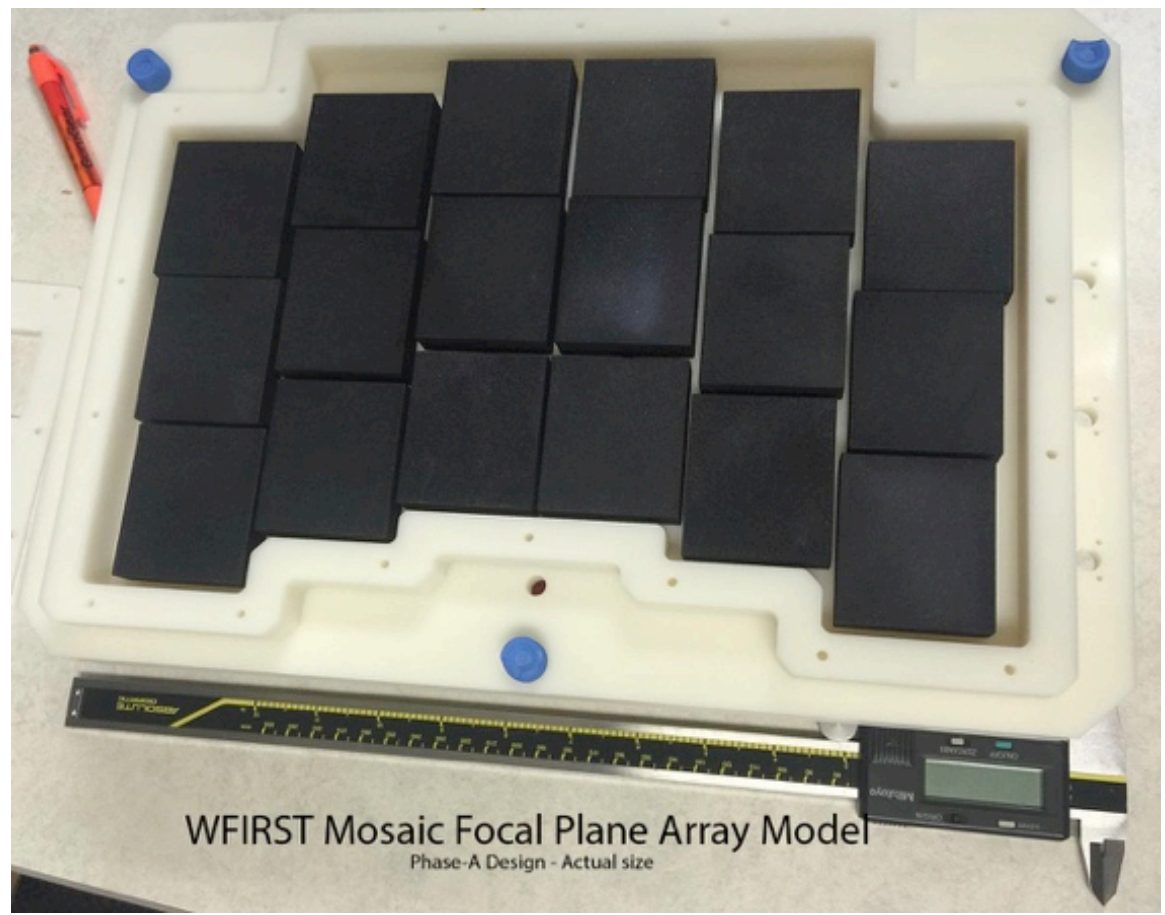


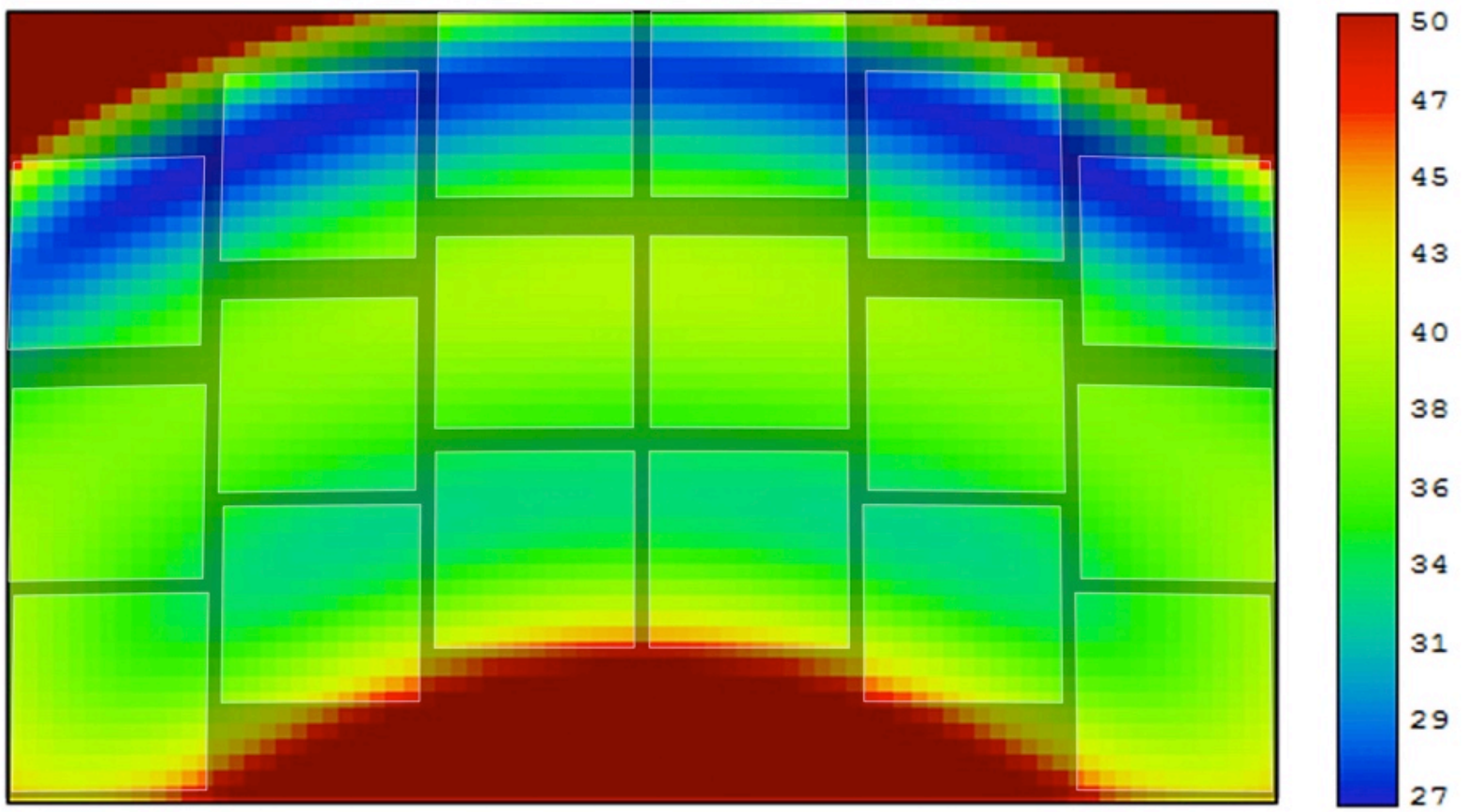


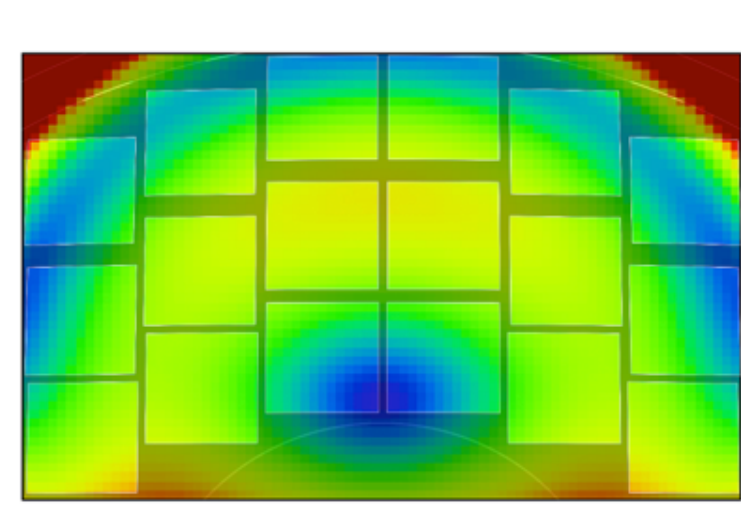




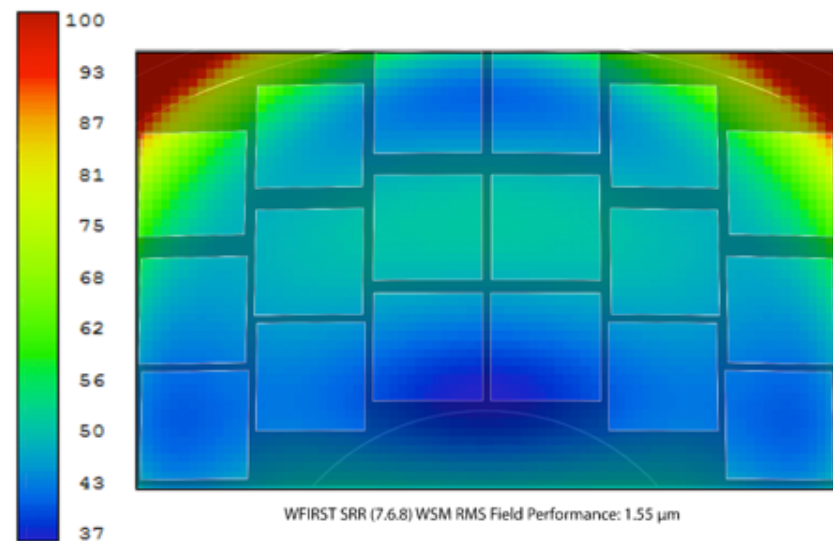




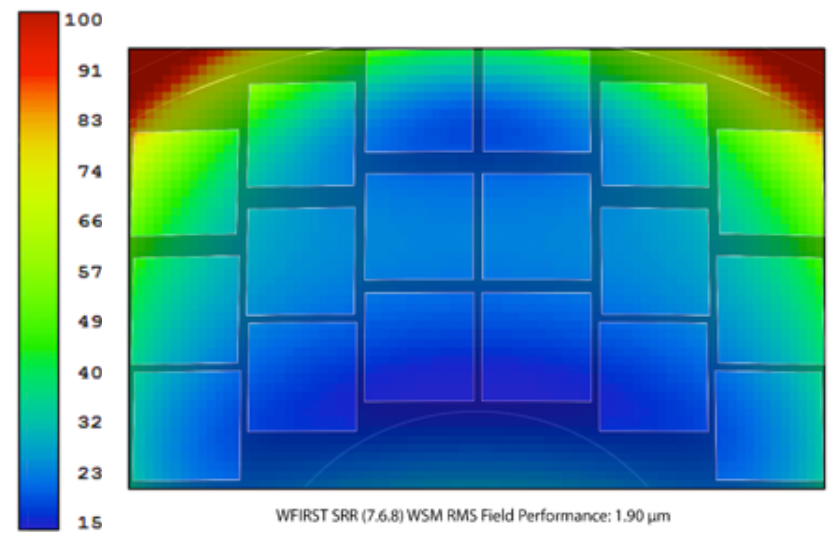




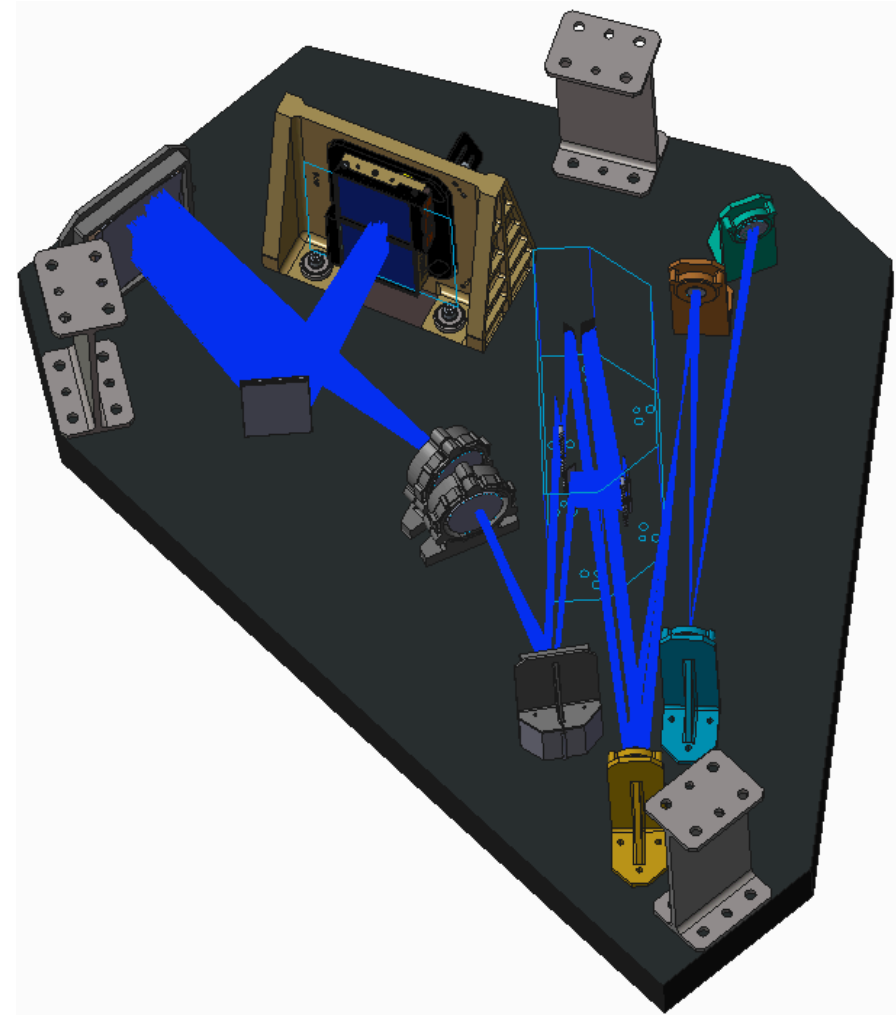
WFIRST SRR (7.6.8) WSM RMS Field Performance: 0.95 μm



WFIRST SRR (7.6.8) WSM RMS Field Performance: 1.55 μm



WFIRST SRR (7.6.8) WSM RMS Field Performance: 1.90 μm



- System Requirements Review (Late 2017)
- Optical sensitivities and predictive performance modeling
- Roadmap to the Phase-B proto-flight design work
- Inter-disciplinary analysis
- Scientific simulations
- Acquisition strategy



Thank You!



Questions & Answers

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