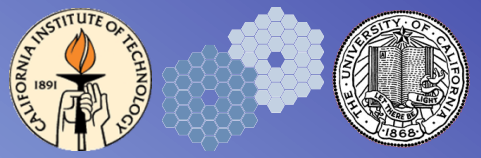

NGAO AO Relay Mini-Design Review

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November 17, 2009

Agenda

- 1:00 pm: Welcome and introductions
- 1:05 pm: Presentations
- 2:30 pm: Response to reviewers' questions
- 2:50 pm: Break
- 3:00 pm: Open discussion and questions
- 4:00 pm: Review committee closed session
- 4:45 pm: Review committee feedback to team

Charge to reviewers

- Evaluate the design for
  - Technical feasibility and design completeness
  - Satisfies requirements
  - Risk is manageable
  - Approach is cost effective
- In scope of review:
  - Optical and mechanical design for the AO relay(s)
  - DMs and TT stages
  - Switchyard
  - Not covered: ADC design - not yet complete

Charge to Reviewers (2)

- Not in the scope of this review:
  - AO subsystems: LOWFS or HOWFS, instrument, acquisition camera, calibration unit
  - Enclosure or environmental control
  - Operational concepts or procedures
  - Integration and test plan

Requirements

- OptomechanicalRequirements.xls

Compliance	Short Name	ID	Section	Category	Priority	PBS
Yes	Performance at operating temperature	FR-61	Optical	Performance	Essential	1.2
Yes	Performance at dome ambient temperature	FR-62	Optical	Performance	Important	1.2
Not all mechanisms are specified yet	Alignment	FR-63	Optical	Functional	Essential	1.2

Compliance Key:	
in compliance	
unresolved	
push back	

Requirements (2)

- A large number of requirements still have TBDs
  - Background / baffling
  - Stability of support and alignment
  - Windows quality, throughput (in FPR; there is now a flow-down)
  - Rotator alignment, stability, tracking error
  - Relay focal plane curvature, static optical quality
  - FR-71 is inconsistent with present BTC architecture

- Note: in collaboration with the SYSENG team, we can now start clearing up many of these TBDs given the current state of the design as a baseline

Presentations:

- Optical Design
- Mechanical Design