

Welcome

Introduction

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Information Day

- Purposes of today
 1. ‘Kick-off’ of GMTIFS project
 2. Introductions:
 - industry to astronomers
 - astronomers to other interested astronomers
 - both to GMTIFS project, to GMT in general
 3. Outline our thoughts on procurement
 - International GMT project
 - GMTIFS

How we got to today

- Scientific imperatives
 - early Universe
 - black holes
 - planetary systems
- Technological imperatives
 - sensitivity, resolution
- Government policy
 - economy, jobs, space science

Education Investment Fund

- Goals of program
 - are to fund: ...innovative and transformative projects to help equip Australians with the high level skills and knowledge necessary in an increasingly competitive world economy.
 - consensus translation: new uni buildings and labs
- ANU
 1. Chemistry building
 2. ‘GMT: Laboratory to the Stars’
 - associated organizations: GMTO, AAL, AAO

‘Laboratory to the Stars’

- Overall goals of GMT participation
 - position our community for next decade
 - scientifically
 - technologically
 - politically
- EIF-GMT award of \$88.4M
 - AITC laboratory upgrade
 - contribution to Telescope construction (10% share)
 - support for GMTIFS project
 - win bid; do design and development, construction
 - develop in-country Adaptive Optics capability

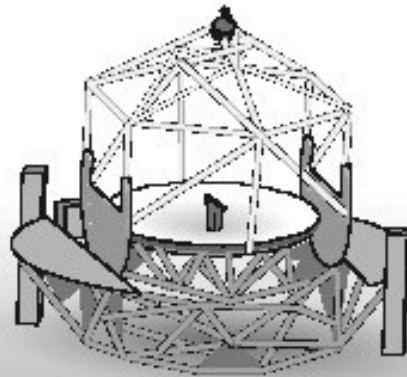
International GMT Project

- Consortium of 10 institutions
 - **Australia:** ANU, Astronomy Australia Ltd (AAL)
 - **South Korea:** Korean Astronomy & Space Science Institute
 - **USA:** Arizona, Carnegie, Chicago, Harvard, Smithsonian, Texas²
- GMTO Corporation
 - primary organisational vehicle for project
 - Project Office hires staff, leases site, does overall procurement
 - non-profit, mostly private funding
 - each 5% partner has a seat on GMTO Board
 - Project Office in Pasadena, California
 - Australian groups to contract through PO for GMT work packages

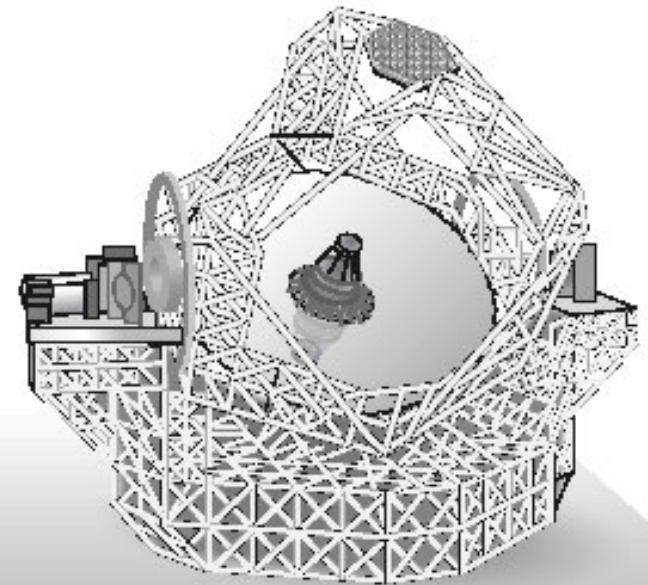
Competition



Giant Magellan Telescope



Thirty-Meter Telescope



European Extremely Large Telescope

Competition

- 3 projects on drawing board globally
 - Giant Magellan Telescope (USA, Australia, Korea)
 - smallest, cheapest, most elegant
 - 7 primary mirrors
 - will do our science; we can influence design, instrumentation
 - Thirty Meter Telescope (USA, Canada, Japan?, China?)
 - preferred site: Hawaii, not yet certain
 - 492 primary mirrors
 - European Extremely Large Telescope (Europe)
 - site uncertain
 - ~1000 primary mirrors
- All 3 aim for operations from 2018
 - all 3 have only partial funding in place
 - only GMT in possession of its site

Thank you