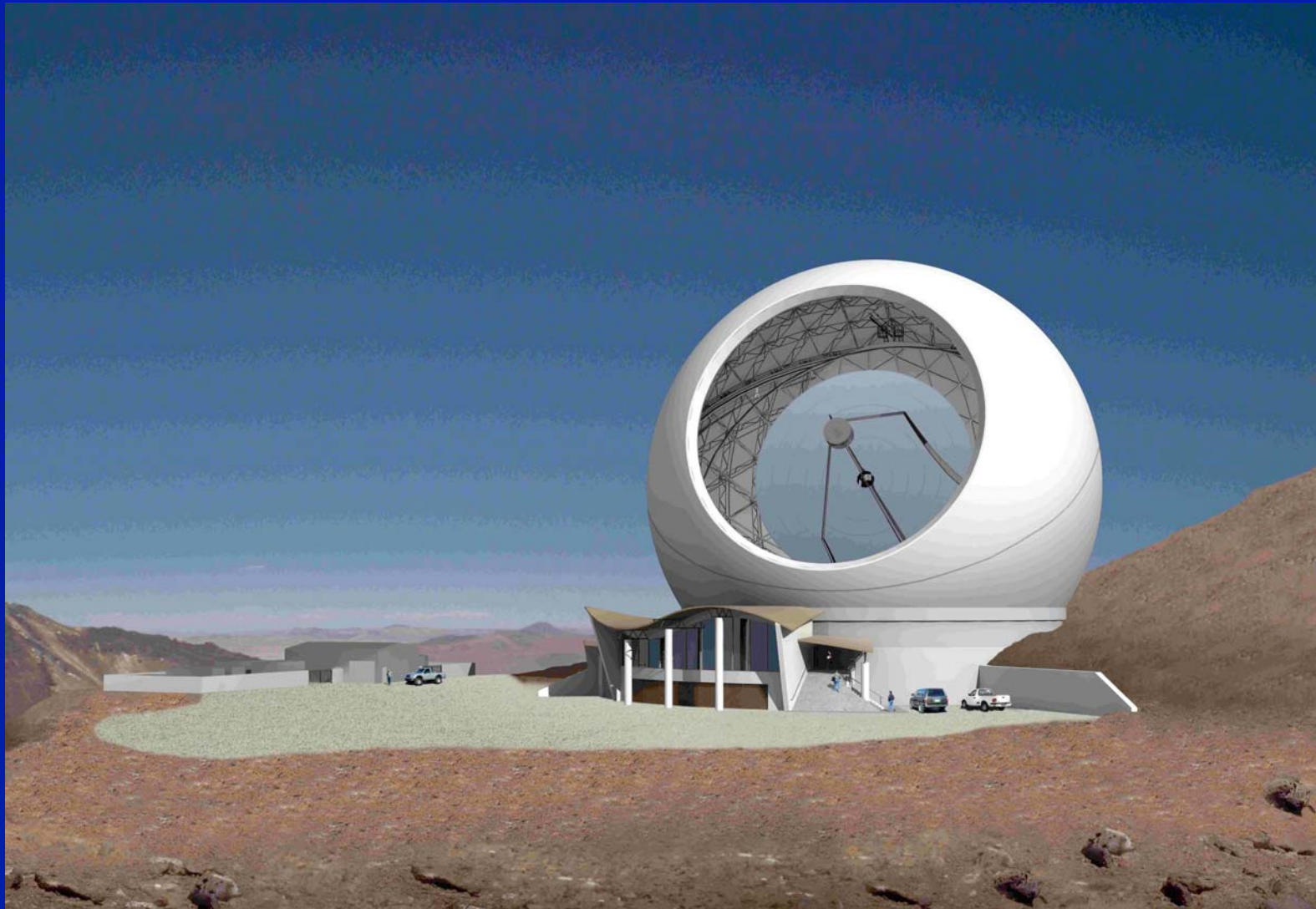


# CCAT Project Status



# The Project:

- Phase 1: Feasibility/Concept Design Study, \$2M, completed and peer reviewed
- Phase II: Engineering Concept Design, 1-year study, \$2M – current work
- Phase III: Development Phase to FDR, Build and Assemble on site
- Phase IV: Commission and into service by 2013
- Total cost \$100M (includes first-light instrument budget of \$20M) plus operating costs of \$5M/y

# The Review Panel Report:

- 'Blue Ribbon Review'
- Chaired by Bob Wilson
- Very supportive:
  - *'Combined with ALMA, which provides unprecedented sensitivity and resolution to image submm/FIR sources, the CCAT will revolutionize Astronomy in the submm/FIR band and enable significant progress in unraveling the cosmic origin of stars, planets and galaxies. CCAT is very timely and cannot wait.'*

# Project Management:

- Project Director: Professor Riccardo Giovanelli, Cornell - leading efforts to develop the full partnership needed to complete the Project.
- Project Manager: Thomas Sebring, Cornell
- Deputy Project Manager: Simon Radford, Caltech.
  - Lead development of the Project from an administrative and technical perspective. The science communities of the partner institutions have developed plans for instrumentation, science programs, and collaborations toward the future of CCAT.

# Partnership Status

- *Cornell University*: The Astronomy Department has identified an individual donor who has pledged to provide \$10 M of Cornell's share. Cornell hopes to have approximately a 1/3 share of CCAT.
- *Caltech*: The Chairman of the Division of Physics Mathematics and Astronomy has indicated that Caltech intends to participate as a partner in the Project and will make funds available for Phase II, looking at 20-25% inc JPL.
- *JPL*: The administration of JPL has indicated intention to continue support development of CCAT. While large investments in ground based astronomy facilities are not likely by NASA, development of instrumentation, focal planes, and other high dollar value elements of CCAT by JPL is under discussion.
- *University of Colorado*: Intention to become a partner at a level of \$10 M, possibility of ZSpeC as day-I instrument.
- *Northwestern*: Looking for 5-10% but must involve technology.
- *Canada*: Probably through individual universities such as UBC and Waterloo at the moment – maybe around \$5-10M.

# So what does this mean?

- Project is short of funding to complete it
- Looking for a 'big' partner rather than lots of little partners
- I have indicated that the UK/Europe would be looking to be partners at the 50% level
- The big questions are:
  - From where do we get the funds ?
  - What are the timescales ?

# What has happened so far ?

- Visit by the CCAT team to the UK and Europe in June 2006
- Business meeting at Cornell in July
- Setting up of a Management Committee and telecons – I am the UK rep on this and one telecon held so far (August) – next scheduled for Sept 26<sup>th</sup>
- Scientific meeting of the UK community - today
- Instrumentation working group meeting Caltech in December

# What do we need to do Now:

- Be very clear as to the scientific importance of CCAT in the realm of post SCUBA-2 surveys, an LMT of 25-50m diameter, and ALMA mosaicing areas of around 1 sq arcmin
- Encourage European scientific support
- Submit an SoI to PPARC this autumn
- Work to get the science case for CCAT on the AstroNet roadmap
- Big question - how do we access Opticon/RadioNet EU FP7 funding sources
- Possibility of SCUBA-2 being a day-1 instrument