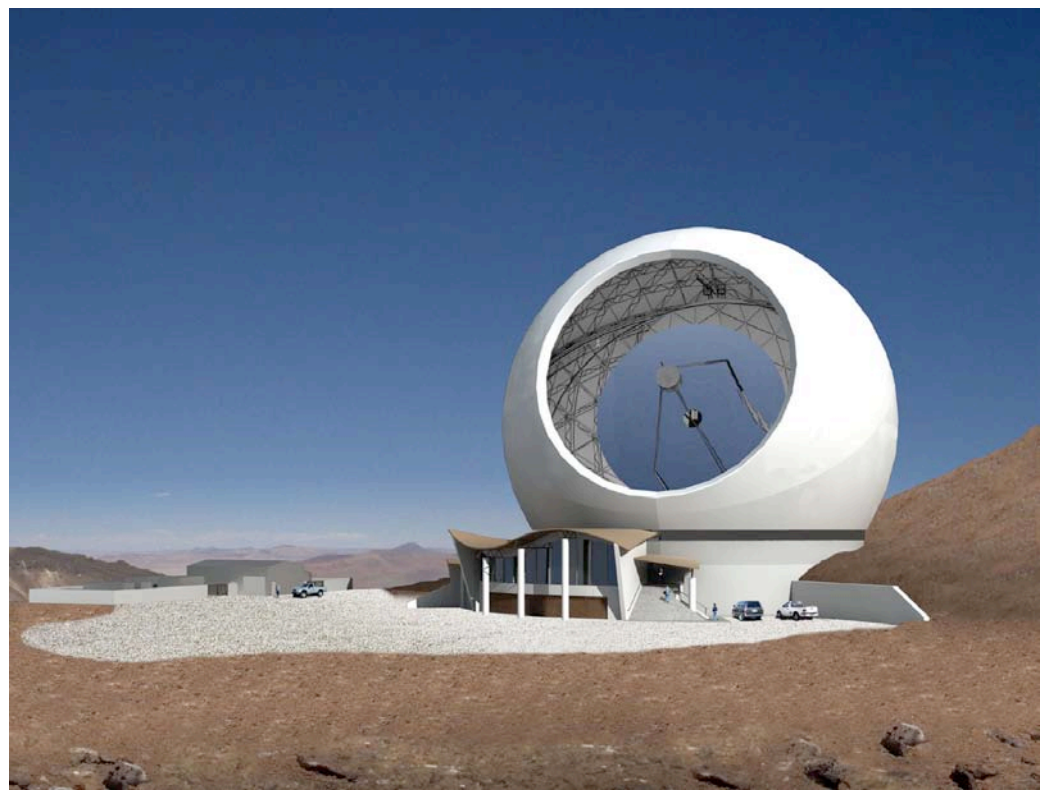
The CCAT News

The Cornell Caltech Atacama Telescope

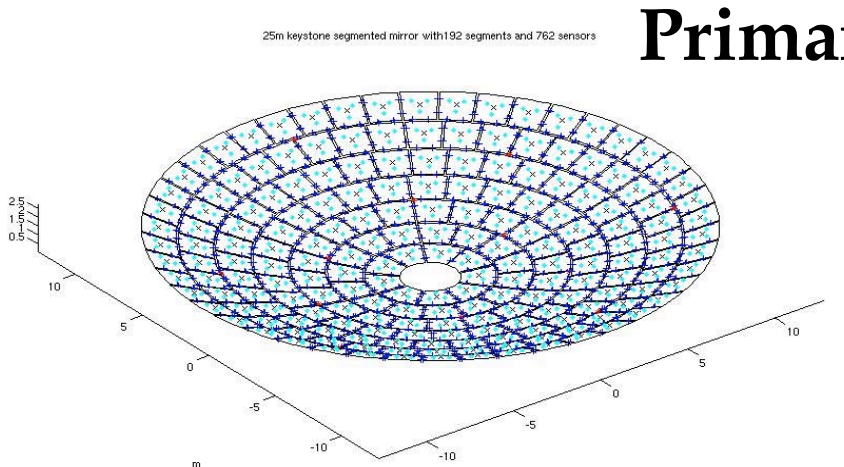
Issue 1 July 2006

CCAT Partnership Meeting a Success



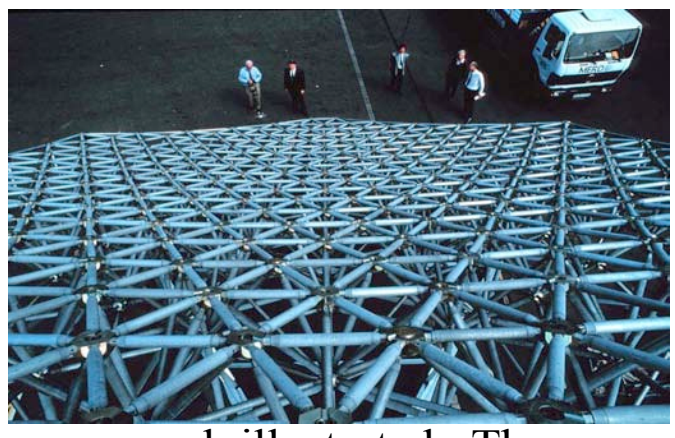
On July 19th & 20th a Partnership Development Meeting was held at Cornell. The first day was devoted to presentations on science and interface between CCAT and existing and future projects. On the second day potential partners had the opportunity to state their intentions regarding CCAT. Cornell and Caltech each reaffirmed their commitment to seek funding representing a major share of the Project. Ian Robson of the Royal Observatory of Edinburgh stated an intention to develop a European consortium to join as a major partner as well. Michel Fich and Colin Borys represented Canada's aspirations and Jason Glenn and Jim Green spoke to the University of Colorado's intent. Were all institutions successful, there would be more than enough funding to complete the Project. The partners discussed an Interim Partnership Agreement, to be signed by the end of this year, under which the Project will be governed until the full partnership is completed during 2007.

Primary Mirror Control Modeling Underway



Efforts are underway at JPL to construct and exercise a model aimed at gaining a more complete understanding of segmented primary mirror control issues. This effort, led by Dan MacDonald of JPL and supported by Dave Woody of Caltech and others, will enable optimization of segmentation patterns, edge sensor placement, and supplementary sensing in order to obtain best performance of the primary mirror segment control system The model is already providing its first results and collaboration between the TMT project and CCAT in this technical area has begun.

Award for Primary Truss Concept Design Imminent



An award is anticipated in the near future to Stutzki Engineering of Milwaukee, WI for the conceptual design of the CCAT primary mirror truss. This effort is to provide initial indications of the size and nature of gravity and temperature driven distortions as inputs to the JPL mirror control modeling effort. Stutzki, who is seen at the right of this image of the Hobby Eberly Telescope mirror truss during acceptance testing, has a long history of truss design and analysis and is particularly skilled at implementation of modular bolted truss designs such as the MERO Structures approach illustrated. The work is expected to be completed by the end of September, 2006.

SPIE Conference Draws 12 CCAT Papers

The International Society for Optical Instrumentation (SPIE's) conference on Astronomical Telescopes and Instrumentation 2006, held from 24-31 May in Orlando, drew 12 papers on CCAT. These included presentations on subsystem designs and analysis of performance.

Site Testing on Cerro Chajnantor

Using a recently developed road, Simon Radford, assisted by Chuck Henderson and George Gull of Cornell, have initiated site testing on the CCAT preferred site. Results to date show that the site is superior to the ALMA site with respect to both wind and PWV characteristics. The site appears extremely favorable for construction and geotechnical testing is anticipated in the next year.

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