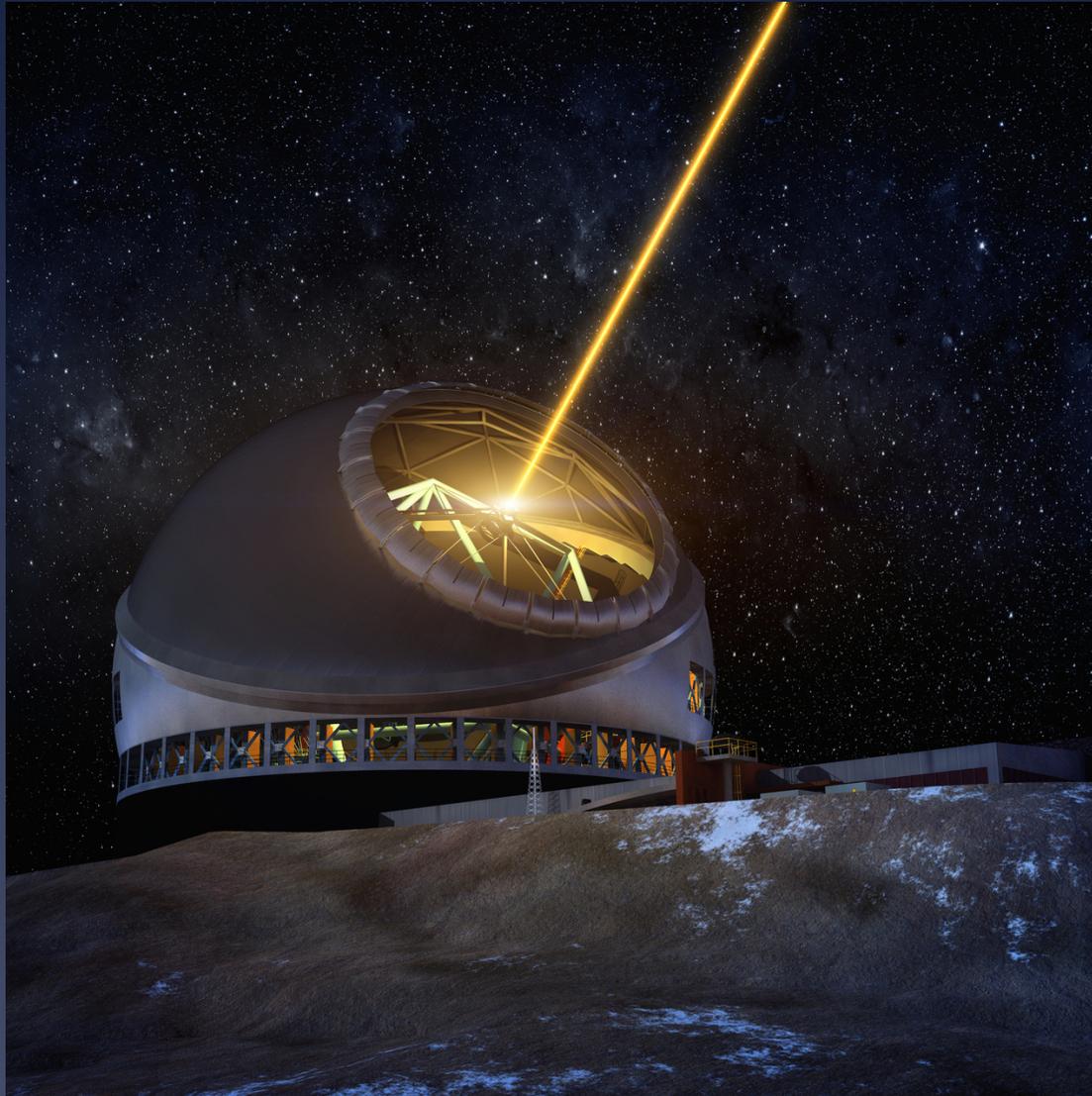


Why are we here?



TOMMASO TREU
University of California Los Angeles

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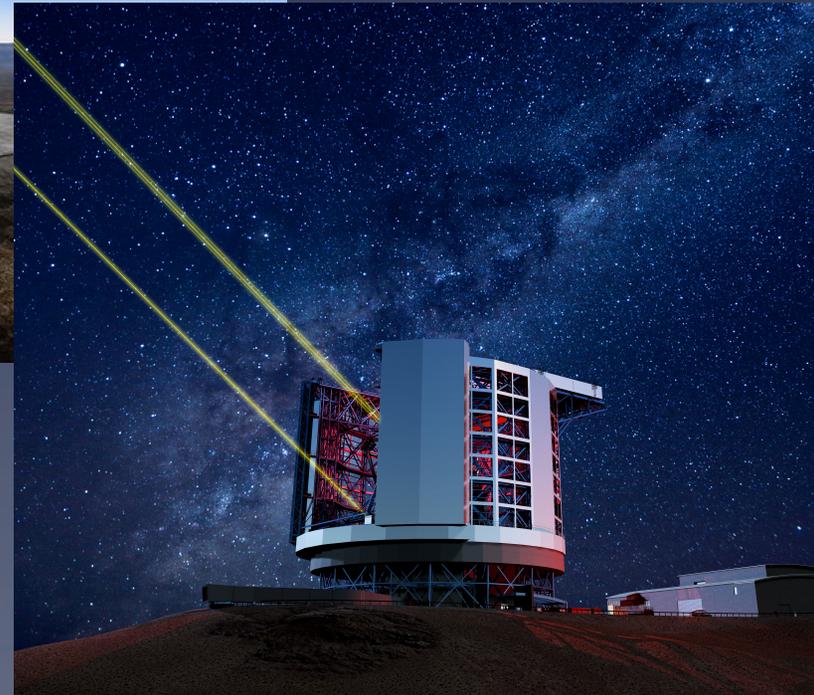
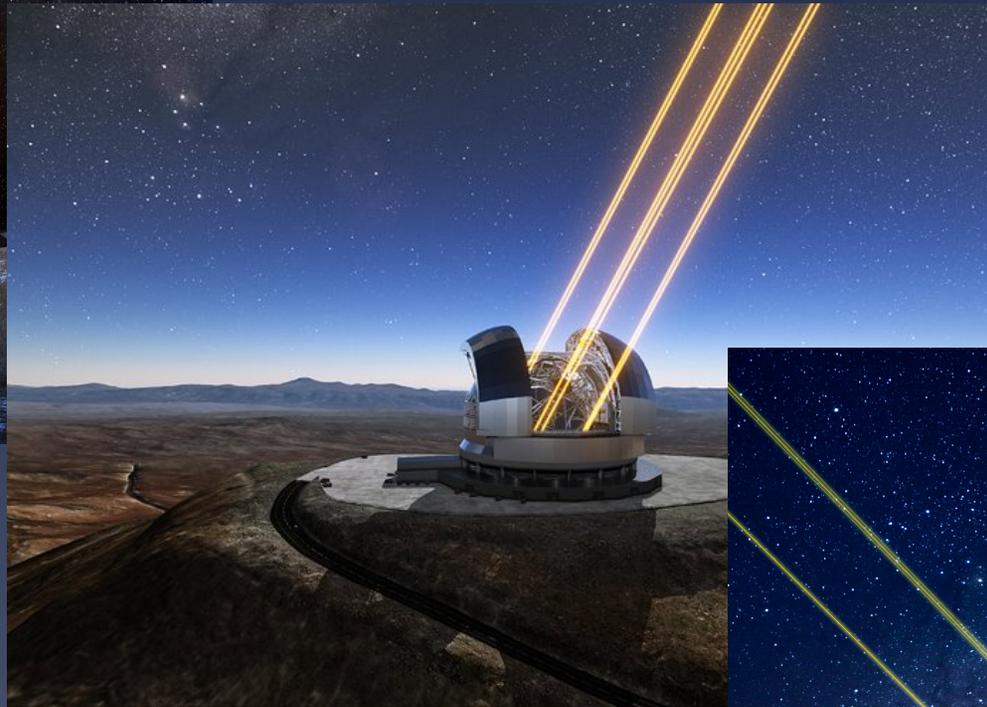
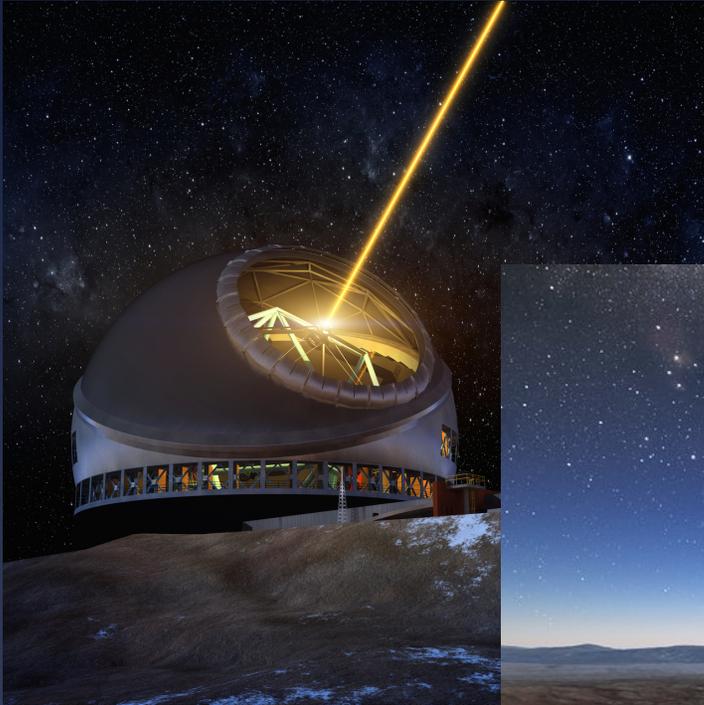


Telescopes are built for scientists!

Outline

- Introduction. Motivation for the conference
- Practical Matters
- Acknowledgements

Three major ELT projects



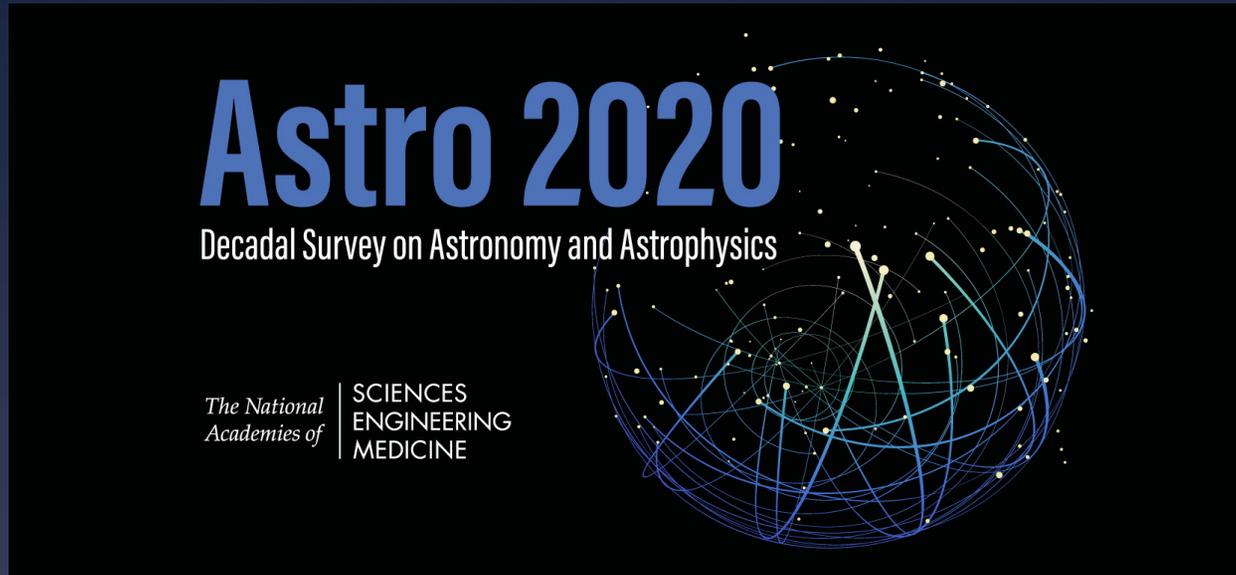
ELTs in context

- * Telescopes cost ~G\$
- * Instruments cost ~100M\$
- * These collaborations are made possible by the support of a large fraction of the people on Earth!
- * Hard choices are necessary and they need to be science driven
- * Science input is necessary at all times during the project
- * ELTs do not operate in isolation (LSST, JWST, ALMA, WFIRST, Euclid..)

ISDT call for membership: deadline Feb 8

<https://www.tmt.org/page/isdt>

From a US point of view



White papers are due February 19
TBC because of shutdown
Science based White Papers

Goals of the series

- * What potentially transformative observations will be enabled by giant telescopes? What capabilities are required?
- * What are the key synergies between giant telescopes and other facilities? What are the areas and topics where a concerted effort will yield far superior results than the sum of all parts?
- * What theoretical or observational work is needed in preparation for first light? What are the limitations in our understanding that need to be overcome?
- * What calculations are required in order to make testable predictions and interpret the results of future astronomical observations?

Three regional conferences

- * Americas: UCLA Jan 28 Feb 1 2019
- * Asia/Oceania: KIPMU March 25-29 2019
- * Europe/Africa: INAF September 16-20 2019

Goal: reduce air travel and cost and increase participation

Modeled after conferences that took place in 2017-2018 on the Dark Universe who had ~200 participants in total

Why UCLA?

- * Science. Many scientists working on topics related to conference (5 on the schedule and many more!).
- * Instrumentation: IR lab is leading the construction of one of the first light instruments (IRIS) and actively engaged in several other concepts that are being considered to follow first light instruments.

Logistics

- * Coffee breaks and lunches will be served at the faculty center to promote interaction.
- * Banquet is Tuesday January 29 6PM.
- * Program is available online. We have a few printed copies if you need it.
- * We would like to post talks online. Michael Topping will collect your talk.

Many thanks to:

- * UCLA Physics and Astronomy Department
- * UCLA Dean of Physical Sciences
- * Kudu. See Warren Essey if you are interested in learning more about their technology.

The end