



# The 2014 TMT Science Forum

## SCIENTIFIC ORGANIZING COMMITTEE:

Nobuo Arimoto (Subaru Observatory)  
Stefi Baum (Rochester Institute of Technology)  
Michael Bolte - Co-chair (UCSC)  
Mark Dickinson - Chair (NOAO)  
Paul Hickson (University of British Columbia)

# The TMT Science Forum is...

- An annual gathering of astronomers from the TMT International Observatory partnership
  - **Here, today:** scientists from Canada, China, India, Japan and the United States
    - Plus other international guests!
  - Discuss progress and future planning for the observatory, instrumentation, operations, and science programs
- An opportunity for the US community outside the observatory partners (Caltech and the University of California) to become involved in TMT



# The US community and TMT

- 2013: The NSF and TMT entered into a cooperative agreement to engage the US community in TMT planning and development.

**“The primary deliverable of this award is to be a partnership model that might allow NSF to join the TMT Project on behalf of the US astronomical community.”**

- AURA is an Associate Member of the TMT International Observatory
  - Voting membership on the TIO Board and Science Advisory Committee
- NOAO executes the responsibilities, privileges, and participation activities of AURA, representing the US-at-large astronomical community
- NSF supports US community participation in the TMT Forum
  - *More than half of you are from US institutions other than UC + Caltech*

# US TMT Science Working Group

Formed by NOAO to:

- Engage the US community and understand its interests and aspirations for TMT
- Represent those interests to the TMT project, SAC, and Board
- Develop a US TMT Participation Plan for the NSF
  - Draft report this year
  - Final report in 2015

Ian Dell'Antonio (Brown)  
Mark Dickinson (NOAO, chair)  
Anthony Gonzalez (Florida)  
Stephen Kane (SFSU)  
Jamie Lloyd (Cornell)  
Jennifer Lotz (STScI)

Lucas Macri (TAMU)  
Karen Meech (Hawaii/IfA)  
Susan Neff (GSFC)  
Deborah Padgett (GSFC)  
Coty Pilachowski (Indiana)  
Kartik Sheth (NRAO)  
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***\* TMT Science Advisory Committee or Board member***

# TMT Science Forum program

*“TMT in the Astronomical Landscape of the 2020s”*

- Today:**
- Introduction and TMT overview / status
  - Scientific synergies between TMT and current and future astronomical facilities

- Tomorrow:**
- TMT Instrumentation Workshop (all day)
  - Topical science parallel sessions and International Science Development Team (ISDT) working meetings (afternoon)

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| <ul style="list-style-type: none"><li>• Fundamental Physics &amp; Cosmology</li><li>• Early Universe, Galaxy Evolution, and the IGM</li><li>• Milky Way and Nearby Galaxies</li><li>• Supermassive Black Holes</li></ul> | <ul style="list-style-type: none"><li>• Formation of Stars &amp; Planets</li><li>• Exoplanets</li><li>• Our Solar System</li><li>• Time Domain Science</li></ul> |
|--|--|

- Saturday:**
- ISDT science reports
  - Workforce, Education, Public Outreach, & Communications
  - Open discussion: important issues & future directions

# International Science Development Teams

- |  |  |
|--|--|
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- Provide **scientific input & guidance** to TMT
- Help **define observatory capabilities & operations model**
- Stimulate planning for **future TMT science programs**
- **Foster collaboration & cooperation** between scientists in and beyond the international TMT partnership
- **165 scientists worldwide**, with annual call for new members
  - 57 ISDT members are here for this year's Forum

# TMT Forum Do's and Don'ts

## Do:

- Plan great science with TMT
- Talk to TMT scientists and the US TMT Science Working Group
- Tweet: **#tmts14**
- Wake up early! It's the nicest time of the day...
- Enjoy Ventana Canyon & the surrounding desert
- *Drink water – stay hydrated!*

## Don't:

- Ignore talks and read your e-mail
  - (**Network:** NOAO2014, **Password:** “wireless”)
- Roast in the mid-day sun without water, hat & sunscreen
- Get hit by lightning during monsoon thunderstorms



***Program:*** <http://conference.ipac.caltech.edu/tmtsf2014>

***Speakers:*** Put your talks on the conference laptop

***Breakfast, lunch & breaks:*** Kiva B (next door)

***Friday breakout / parallel sessions:*** Salons C, J, K, L,  
Sabino, Rincon, Santa Rita (in main hotel building)

## **Local Organizing Committee:**

David Atlee (NOAO)

Mark Dickinson (NOAO)

Hanae Inami (NOAO)

Holly Novack (TMT)

Jane Price (NOAO)

Warren Skidmore (TMT)

Gordon Squires (TMT/Caltech/IPAC)

Joelle Zavzavadjian (TMT)