## UNIVERSITY OF CALIFORNIA OBSERVATORIES

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To: University of California Astronomy Community

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Subject: Background on the Thirty Meter Telescope and Maunakea

As astronomers, we have been tremendously fortunate to conduct observations from telescopes around the world. Astronomers at the University of California cherish these opportunities and understand that we are fortunate to live in a time when our human condition offers the ability to study and explore the Universe, and try to answer questions like "Are we alone in the Universe? Where do we come from?"

Mountain tops across the globe offer the best viewpoints for peering into space. Maunakea in Hawai'i is truly a special place on Earth, providing the best window in the northern hemisphere to study the night sky with a pristinely stable, clear atmosphere. We recognize the unique nature of Maunakea, as well as the entire Hawaiian archipelago, and deeply respect the universal esteem in which it is held by native Hawaiians.

For the last 10 years, the Thirty Meter Telescope (TMT) project has been engaging with the Hawai'i community and state to develop the next-generation telescope on Maunakea. The University of California is one partner in the TMT project and collaborates with the California Institute of Technology and the countries of Canada, China, India, and Japan in this endeavor. Through engagement with the Hawai'i community, including opponents of astronomy at Maunakea, we have become far better informed about the history of Maunakea and the problems that the development of astronomy at Maunakea has caused in the past. We are grateful to the voices in Hawai'i who have opened our eyes. As a community at the University of California, we are striving to become not only better listeners but also advocates for positive change in Hawai'i, particularly for the native Hawaiian community.

Over many years, TMT worked closely with the Hawaiian community to address a range of cultural, environmental, educational, and economic issues, and has followed the legal processes outlined by the State of Hawai'i. The results of this dialogue can be found at MaunakeaAndTMT.org. Of note:

- The site for TMT was carefully selected to pose minimal environmental and archaeological risks. The selected site has no archaeological shrines or features, no endangered plants, no endangered insects, and no burials.
- The observatory has designed a telescope that will leave no waste on the mountain and is highly energy efficient.
- Because the TMT consortium recognizes the importance of sustaining a strong local workforce, and because we got a clear message from the local community about local

needs, TMT has established The Hawai'i Island New Knowledge (THINK) fund that annually invests in education specifically for local communities (with investments commencing as of 2014).

- TMT is an active participant and supporter of the University of California's Akamai Workforce Initiative (https://akamaihawaii.org/) that implements local internships for growing and sustaining a strong STEM workforce in Hawai'i.
- TMT has committed to a meaningful annual lease that will directly fund Maunakea stewardship and programs for native Hawaiians.

However, it is clear that not everyone agrees that the results of this process and the decision to proceed with construction on Maunakea are the correct outcomes for Hawai'i. Among those who remain opposed are many who see TMT as part of a much larger political issue of Hawaiian sovereignty and past injustices. We respect those who express opposition and empathize with the pain they feel.

TMT and the University of California are committed to ongoing community activities and dialogues throughout the Hawaiian Islands. We are continuing to listen to those voices and we are hopeful that a path forward can be found for building TMT that results in a harmonious relationship between the astronomy community and the indigenous population. After all, many native Hawaiians and others believe that Maunakea is sacred and yet can still be home to astronomy. When completed, TMT will be a technological marvel, built by our generation of astronomers for the next generation of scientists who we hope will use it to explore the wonders of the cosmos. We would like to join the people of Hawai'i in that story of exploration.

We support the efforts of Hawai'i Island Mayor Harry Kim, who has been tasked with bringing the many voices together to reach common ground and achieve a peaceful resolution where Maunakea can serve as a beacon of hope and discovery for the world. We understand that this may take time, as there is no sovereign political entity for native Hawaiians; there are many groups with differing views rather than one voice representing all Hawaiians.

We hope the discussions about TMT and Maunakea will serve as a starting point for scientists to think more carefully about our place in the ongoing struggle of indigenous populations everywhere, and how we can be advocates for their rights and for their control over their ancestral lands. Just as we think deeply about questions related to our Universe, we need to think deeply about the unique and fragile planet that we all share. We hope that our colleagues around the world will join us in committing to continue these conversations.