UNIVERSITY OF HAWAIʻI SYSTEM
ʻŌNAEHANA KULANUI O HAWAIʻI

Legislative Testimony
Hōʻike Manaʻo I Mua O Ka ʻAhaʻōlelo

Testimony Presented to the
Senate Committee on Ways and Means
Wednesday, February 22, 2023 at 10:00 a.m.
by
Vassilis L. Syrmos, Vice President for Research and Innovation
University of Hawaiʻi System

SB 1510 – RELATING TO UNIVERSITY OF HAWAII ASTRONOMY ENGINEERING AND INSTRUMENTATION

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

The University of Hawaiʻi (UH) strongly supports SB 1510 which appropriates funds to establish a UH center for the design, development and fabrication of ground-based astronomical instruments; its planning and design; and ten full-time faculty positions.

Although astronomy contributes well over $200 million annually to Hawaiʻi's economy, most of the current technology development and fabrication for the astronomical facilities here come from outside of the state. Similarly, of the state's astronomy workforce of about 400 engineering and technical positions, only 30 percent are born and raised in Hawaiʻi.

SB 1510 represents the tip of the spear for the UH's new Space Science and Engineering Initiative that seeks to create a stronger pipeline and diverse network of local engineers that are equipped with the necessary educational background, experience and facilities to support the growth and sustainability of astronomy in Hawaiʻi. It is the result of over six months of extensive collaboration between UH Mānoa College of Engineering Dean Brennon Morioka, Institute for Astronomy Director Doug Simons and UH Hilo Chancellor Bonnie Irwin.

The new center will serve as a multi-disciplinary hub for education, research and innovation for both students and faculty, including ties to UH's new aerospace engineering program and a new link to the Akamai Internship Program that has served as a highly successful STEM pathway to astronomy for women, Native Hawaiians and other underrepresented groups for over 20 years. As an advanced manufacturing and prototyping hub, the center will bring a new source of jobs and create revenue for the Hilo community, and at the same time, help to further diversify the state's economy.

The University of Hawaiʻi supports SB 1510 provided that its passage does not replace or adversely impact priorities as indicated in UH's BOR Approved Budget.

Thank you for the opportunity to testify on this measure.

MAUNAKEA OBSERVATORIES

To: Senator Donovan Dela Cruz, Chair
Senator Gilbert Keith-Agaran, Vice Chair
Committee on Ways and Means

From: Maunakea Observatories

RE: **SB 1510 - Relating to University of Hawai‘i Astronomy Engineering and Instrumentation - In Support**
Wednesday, February 22, 2023; 10:00 a.m.; Conference Room 211 & Videoconference

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee,

Mahalo for the opportunity to testify in strong support of SB 1510 - Relating to University of Hawai‘i Astronomy Engineering and Instrumentation. We, the undersigned representatives of Maunakea Observatories, appreciate and support the act’s purpose as articulated: “to sustain the continued prominence of Hawaii's astronomy by establishing and funding a center for design, development, and fabrication of astronomical instruments within the University of Hawai‘i.”

We believe that this proposal would be important in supporting the long-term success of Hawai‘i astronomy, and more importantly, create a more robust high-tech workforce pipeline for local talent, while continuing to strengthen the diversity of Hawai‘i Island’s economy and the state as a whole. Valuable outcomes of this initiative will include:

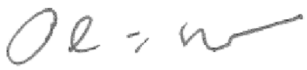
- Supporting local workforce development with a focus on engineering jobs
- Diversifying the local economy by increasing STEM opportunities
- Increasing astronomy instrumentation design/build capacity on Hawai‘i Island
- Helping train local engineering students for placement in jobs in Hawai‘i astronomy

It is clear that in order for Maunakea astronomy to continue to lead the world in scientific achievement, we must continue to innovate. We are grateful for the opportunity for astronomy to provide a platform for creative and motivated local talent to find career pathways in engineering, including in the design, development and fabrication of sophisticated instrumentation. The University’s College of Engineering is uniquely well-suited as an anchor for this kind of program, and through the well-established infrastructure of the university system, is well-placed to stand up a world-class center for the design, development and fabrication of astronomical instruments, supported by the proposed full-time equivalent faculty positions to support this endeavor. We stand ready to collaborate with the University in support of the students and faculty who will participate in the Center’s success.

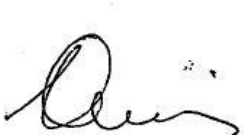
Thank you for the opportunity to provide testimony in support of SB 1510.

With aloha,

Director Jean-Gabriel Cuby, Canada-France-Hawai‘i Telescope



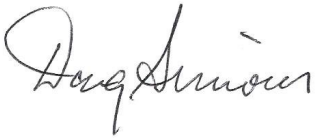
Director Paul Ho, East Asian Observatory (James Clerk Maxwell Telescope)



Director Hilton Lewis, W.M. Keck Observatory (Keck I and Keck II)

Director John Rayner, NASA Infrared Telescope Facility

Director Mark Chun, University of Hawai‘i 2.2-meter Telescope



Director Doug Simons, University of Hawai‘i, Institute for Astronomy

Director Timothy J. Norton, Submillimeter Array

SB-1510
Submitted on: 2/16/2023 6:03:48 PM
Testimony for WAM on 2/22/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Alan Urasaki	Individual	Support	Written Testimony Only

Comments:

I urge the committe to pass this measure. Mahalo.