Subaru Users Meeting

Doug Simons
UH Institute for Astronomy
October 2025

Arrivals, Outreach, Awards...

Incoming Faculty

Nour Skaf

Hilo (starting as faculty May 18, 2026)
Currently: 51 Pegasi b Fellow @ IfA Hilo
Previously: Postdoctoral Researcher @ UC Santa Cruz
PhD: Observatoire de Paris

Research interests: exoplanet science, adaptive optics

51 Pegasi b
Fellowship in Planetary Astronomy

Rohan Naidu

Mānoa (starting June 1, 2026)
NASA Pappalardo Fellow @ MIT
PhD: Harvard University

Research interests: galactic archaeology surveys; first stars & galaxies; cosmic reionization

Department of Physics

Incoming Faculty

Neige Frankel

Mānoa (starting August 3, 2026)
Postdoctoral Fellow @ CITA
PhD: IMPRS (International Max Planck Research School) Heidelberg

Research focus: disk galaxy evolution

Kartheik Iyer

Mānoa (starting August 3, 2026)
NASA Hubble Fellow @ Columbia
PhD: Rutgers University

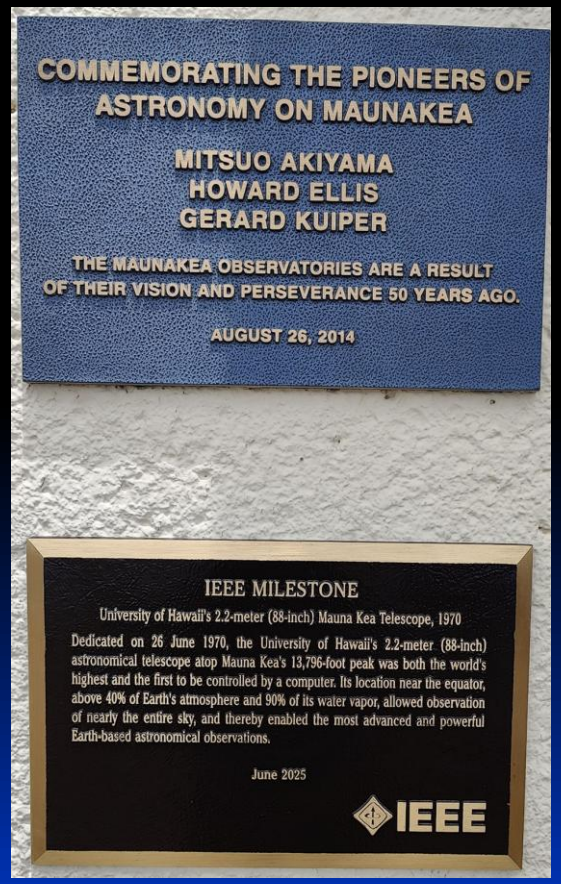
Research focus: computational extragalactic astronomy

Additional Faculty Positions

- IfA is now advertising for two more faculty openings – one located at IfA-Mānoa and the other IfA-Maui
- Combined with 8 new IfA faculty positions filled over the past ~3 years, and 8 new Space Science and Engineering faculty positions (collaboration between IfA and UH College of Engineering), 18 new faculty positions directly linked to IfA filled over the past few years
- 6 new graduate students added in 2025 cohort
- Despite uncertainties about the future, IfA continues to grow its capacity for research, education, and technology development

Community Connections

UH 88” Honored with IEEE Milestone



Credit: W. Layugan

Citation: “Dedicated on 26 June 1970, the University of Hawaii’s 2.2-meter (88-inch) astronomical telescope atop Mauna Kea’s 13,796-foot peak was both the world’s highest and the first to be controlled by a computer. Its location near the equator, above 40% of Earth’s atmosphere and 90% of its water vapor, allowed observation of nearly the entire sky, and thereby enabled the most advanced and powerful Earth-based astronomical observations.”

UH News, 2025-06-26: https://www.hawaii.edu/news/2025/06/26/maunakea-uh-telescope-global-honor/

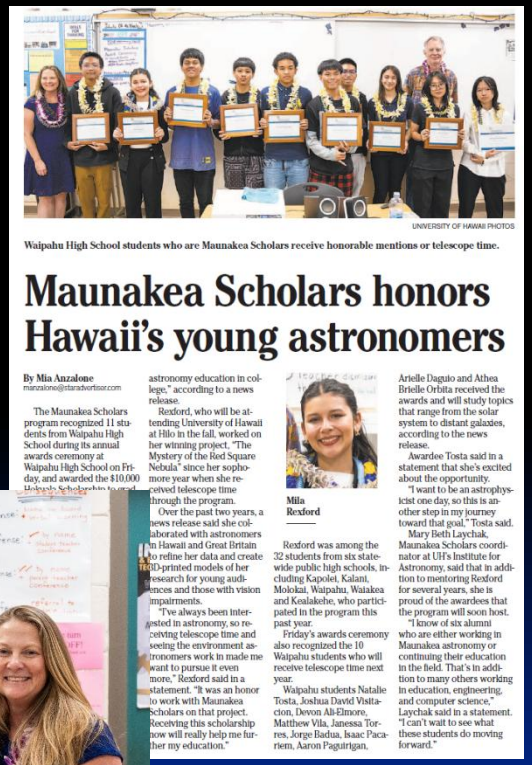
Big Island Now, 2025-06-28: https://bigislandnow.com/2025/06/29/university-of-hawai%ca%bbis-telescope-dedicated-in-1970-now-honored-for-enduring-impact-on-space-exploration/

Tanabata Block Party 2025: August 30

MKO's Supporting Maunakea Forest Restoration

- Maunakea Forest Restoration Project has on-going habitat restoration programs seeking volunteers
- Out plantings intended to push palila bird habitat uphill
  - Keck and IfA helped plant ~1000 trees at the ~10,000 ft level last month
- Most activities for the remainder of the year focus on starting seedlings to plant in the field next year

Maunakea Scholars Awards



UNIVERSITY OF HAWAII PHOTOS

Waipahu High School students who are Maunakea Scholars receive honorable mentions or telescope time.

Maunakea Scholars honors Hawaii's young astronomers

By Mia Anzalone
manzalone@staradvertiser.com

The Maunakea Scholars program recognized 11 students from Waipahu High School during its annual awards ceremony at Waipahu High School on Friday, and awarded the $10,000 Hokuala Scholarship to read astronomy education in college," according to a news release.

Rexford, who will be attending University of Hawaii at Hilo in the fall, worked on her winning project, "The Mystery of the Red Square Nebula" since her sophomore year when she received telescope time through the program.

Over the past two years, a news release said she collaborated with astronomers in Hawaii and Great Britain to refine her data and create 3D-printed models of her research for young audiences and those with vision impairments.

"I've always been interested in astronomy, so receiving telescope time and seeing the environment astronomers work in made me want to pursue it even more," Rexford said in a statement. "It was an honor to work with Maunakea Scholars on that project. Receiving this scholarship now will really help me further my education."

Mila Rexford

Rexford was among the 32 students from six statewide public high schools, including Kapolei, Kalani, Molokai, Waipahu, Waiakea and Kealakehe, who participated in the program this past year.

Friday's awards ceremony also recognized the 10 Waipahu students who will receive telescope time next year.

Waipahu students Natalie Tosta, Joshua David Visitacion, Devon Ali-Elmore, Matthew Vila, Janessa Torres, Jorge Badua, Isaac Pacariem, Aaron Pagurigan, Arielle Daguio and Athea Brielle Orbita received the awards and will study topics that range from the solar system to distant galaxies, according to the news release.

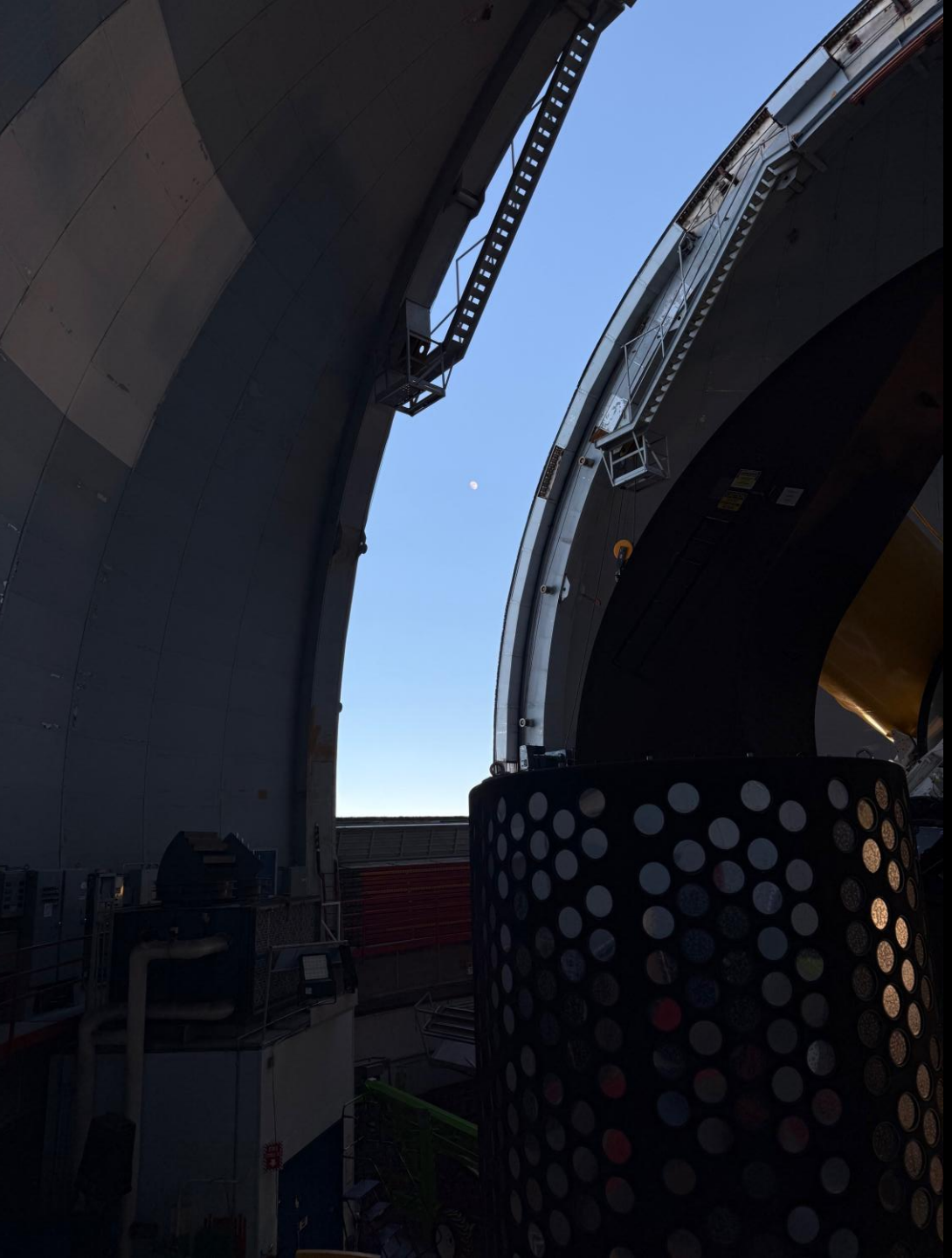
Awardee Tosta said in a statement that she's excited about the opportunity.

"I want to be an astrophysicist one day, so this is another step in my journey toward that goal," Tosta said.

Mary Beth Laychak, Maunakea Scholars coordinator at UH's Institute for Astronomy, said that in addition to mentoring Rexford for several years, she is proud of the awardees that the program will soon host.

"I know of six alumni who are either working in Maunakea astronomy or continuing their education in the field. That's in addition to many others working in education, engineering, and computer science," Laychak said in a statement. "I can't wait to see what these students do moving forward."

Last Spring at Waipahu High School

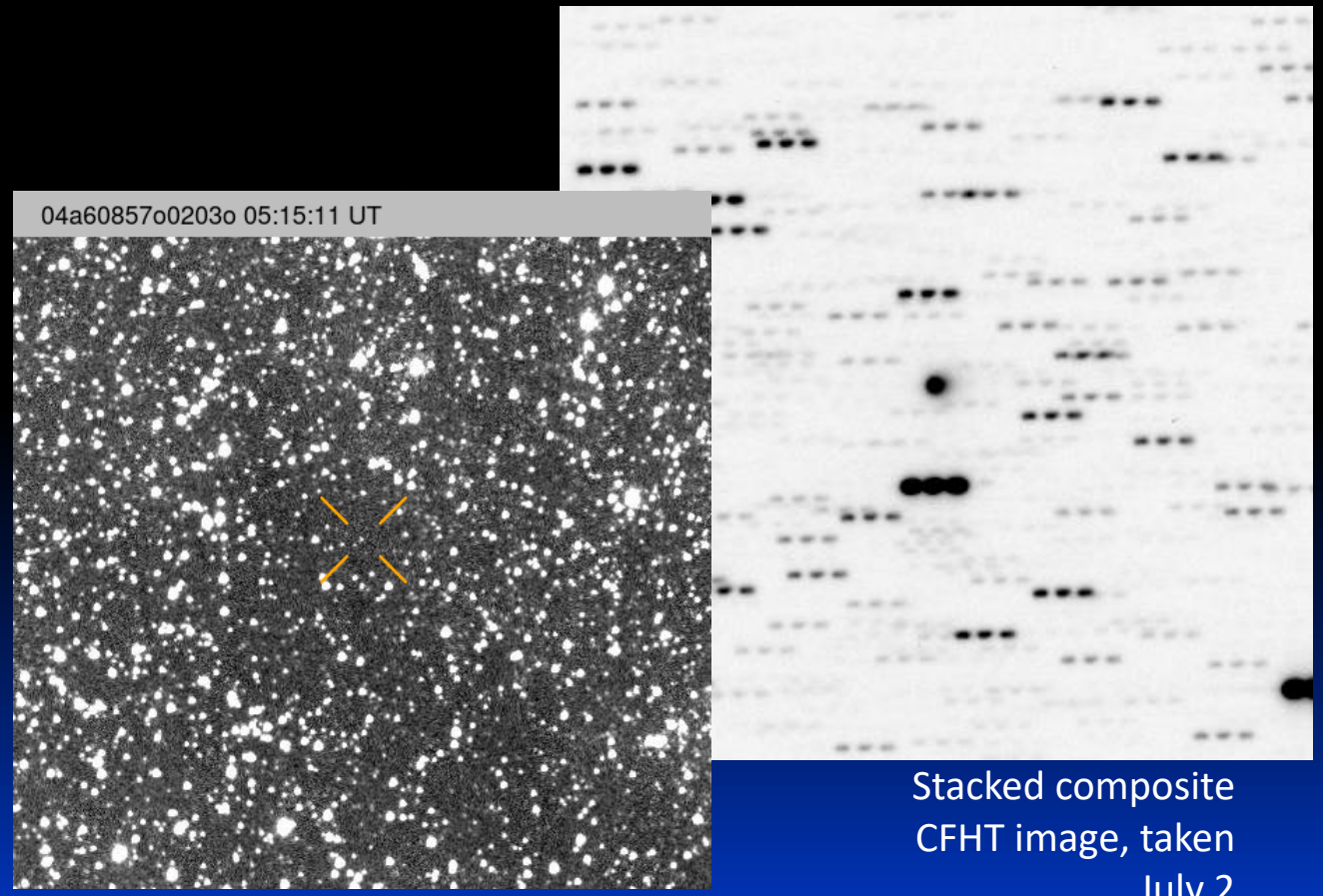


IfA In the News

3rd Known Interstellar Object Identified by ATLAS Chile

Comet C/2025 N1 (ATLAS), a.k.a. 3I/ATLAS detected by ATLAS Chile on July 1

- Many Hawai‘i facilities involved in follow-up observations
  - Maui: ATLAS Haleakalā; Faulkes Telescope North; Las Cumbres Observatory (Haleakalā node)
  - Hawai‘i Island: CFHT, Keck, IRTF, JCMT, ATLAS Maunaloa, UH88
- Orbital eccentricity calculated at ~6.1
  - Previous highest eccentricity: 3.4 (2I/Borisov)
- Many IfA connections with the discovery and follow-up including: Larry Denneau, John Tonry, Andrew Hoffman, Willem Hoogendam, Mark Huber, Karen Meech, Ben Shappee, Robert Siverd, Richard Wainscoat, Rob Weryk, Kyle Hart, Jason Hinkle and Mike Connelley



Stacked composite CFHT image, taken July 2

Weryk & Wainscoat

UH News, 2025-07-02: https://www.hawaii.edu/news/2025/07/02/possible-interstellar-visitor-discovered-by-uh/

KHON, 2025-07-02: https://www.khon2.com/local-news/massive-interstellar-object-discovered-by-hawaii-operated-telescope/

arXiv preprint: https://arxiv.org/abs/2507.02757v1

IfA Highlights – UH News, research notes, etc.

2025 February 2: UH telescope discovers historic asteroid that may strike the Earth in 2032

ATLAS Chile detected 2024 YR4 on December 27; classified as "Torino Scale 3":

"A close encounter, meriting attention by astronomers. Current calculations give a 1% or greater chance of collision capable of localized destruction. Most likely, new telescopic observations will lead to re-assignment to Level 0. Attention by public and by public officials is merited if the encounter is less than a decade away"

Strategic Planning

UKIRT Decommissioning Announced

- process, while completing
- next 2-3 years (pending
- cess to take ~5 years and cost
- Given likely cost for new lease, liabilities, and outlook for UKIRT, concluded it was best to avoid decom plans now, while winding down sci-ops
- h the UH Decommissioning Plan, given CMS has filled that role with 2 past decoms


Hawai'i Tribune-Herald

Saturday, June 28, 2025 Proudly serving Hilo and the Big Island since 1923 $1.50

A boost for ag in Hawaii

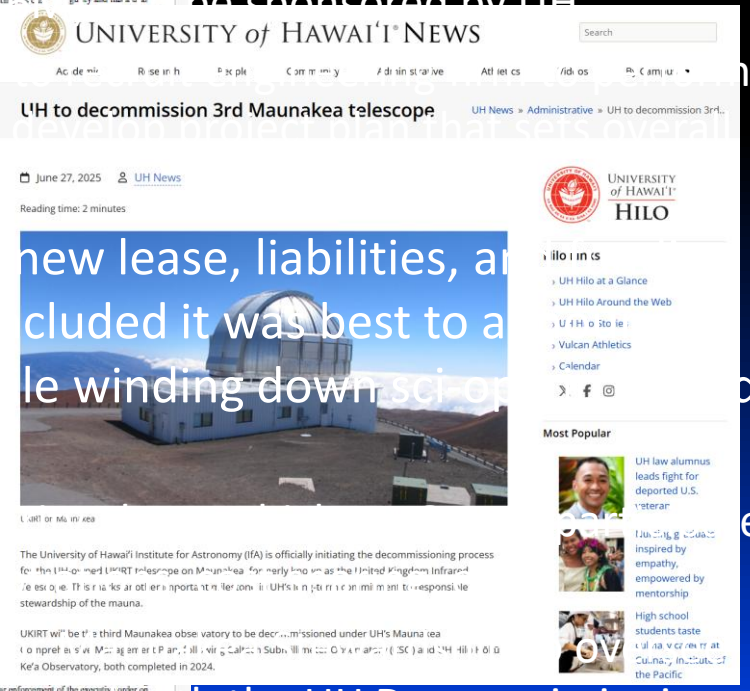
Governor signs measures aimed at protecting farmers and bolstering food security

By JOHN BURNETT
Hawai'i Tribune-Herald

timeline

UH to decommission 3rd Maunakea telescope

UKIRT began operating in 1979


UNIVERSITY of HAWAI'I NEWS

UH to decommission 3rd Maunakea telescope

June 27, 2025 UH News

Reading time: 2 minutes

The University of Hawai'i Institute for Astronomy (IfA) is officially initiating the decommissioning process for the UH-owned UKIRT telescope on Maunakea, formerly known as the United Kingdom Infrared Telescope. This marks another important milestone in UH's long-term commitment to responsible stewardship of the mauna.

UKIRT will be the third Maunakea observatory to be decommissioned under UH's Maunakea Comprehensive Management Plan, following Caltech Submillimeter Observatory and Ke'ā Observatory, both completed in 2024.

UH Hilo

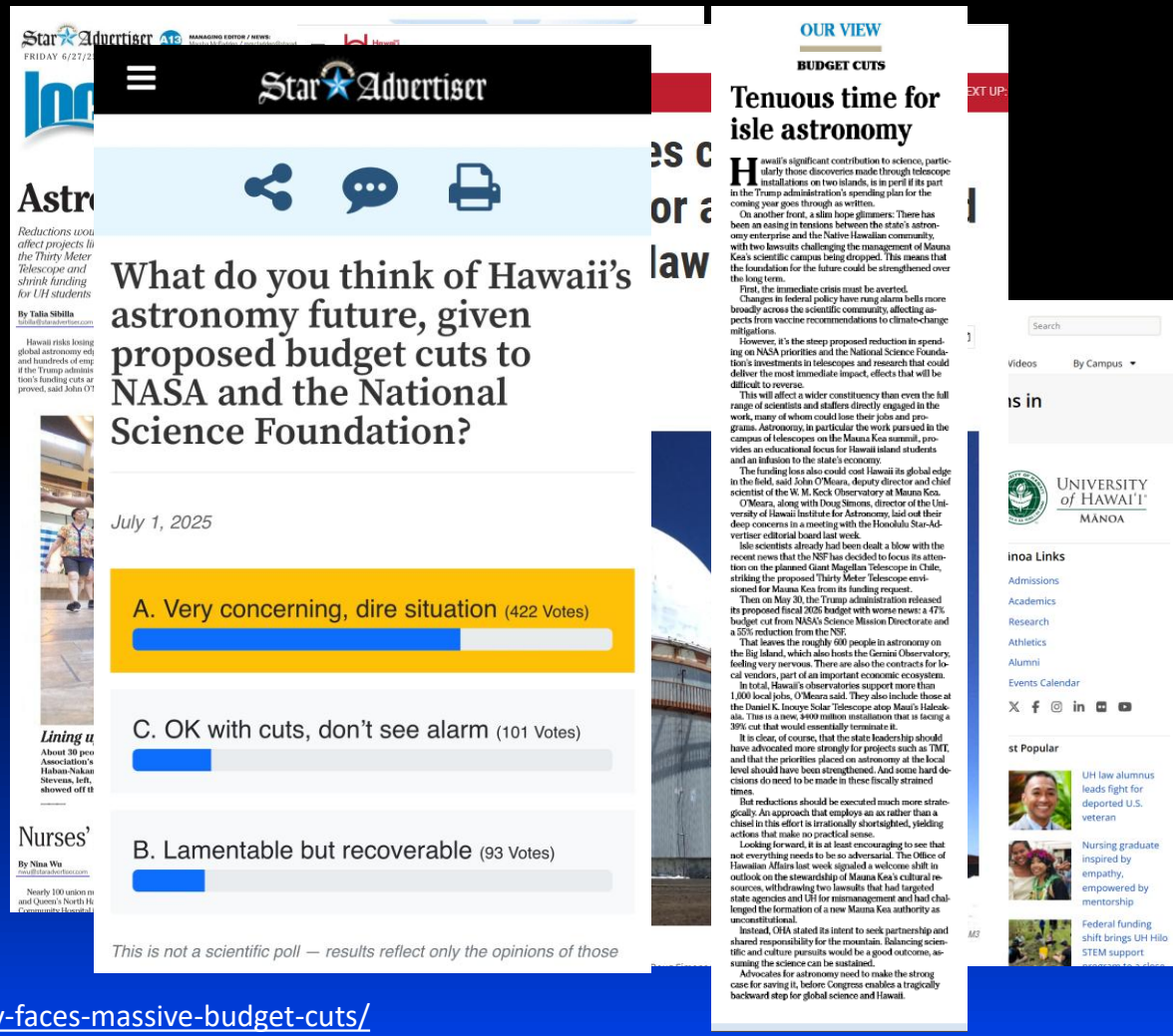
Most Popular

UH law alumnus leads fight for deported U.S. veteran

High school students taste culinary careers at Culinary Institute of the Pacific

On-going Advocacy to Support Funding for Astronomy/Science

- Proposed FY2026 budgets: direct impacts to Hawai‘i astronomy facilities
  - John O’Meara (Deputy Director & Chief Scientist, Keck): “The proposed cut could result in staff reductions, loss of research capacity, fewer ancillary contracts for local vendors, potentially limit public data access, and reduce Keck Observatory’s ability to operate education and outreach programs.”
- At UH, Federal cuts amount to >$100M reductions in funding across many programs, including Minority-Serving Institution (MSI) grant programs (Native Hawaiian & Pacific Islander)
- At IfA, primary impact has been a slowdown in approved grant funds flowing into UH accounts



UH News, 2025-06-10: https://www.hawaii.edu/news/2025/06/10/uh-astronomy-faces-massive-budget-cuts/
Honolulu Star-Advertiser, 2025-06-27: https://www.staradvertiser.com/2025/06/27/hawaii-news/astronomers-concerned-by-federal-cuts/

UH/IfA – Japan Collaboration Meetings

- Discussions are on-going between UH leadership, U. Tokyo, NAOJ about various forms of collaboration that may be of mutual interest
  - Technology development, student exchange, etc.
- UH Space Science and Engineering Initiative an important part of these meetings, but expanding into other areas of research and education
- Building off long standing fruitful collaborations with the Japanese astronomy community…

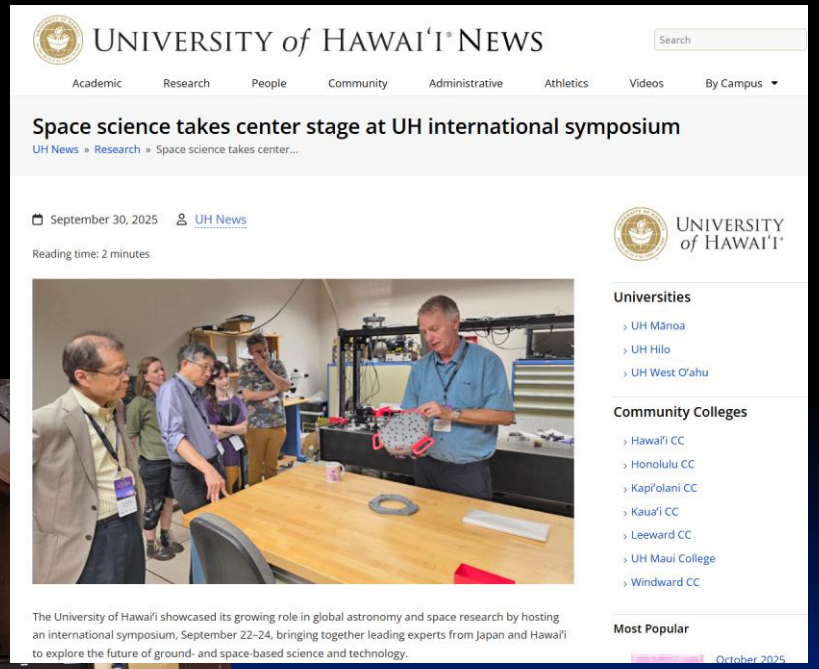
UH/IfA – Japan Collaboration Meetings

Meetings in Tokyo, March 2025

“Space Science Takes Center Stage at UH International Symposium”

UH News, 2025-09-30: https://www.hawaii.edu/news/2025/09/30/space-science-symposium/

“Space Science Takes Center Stage at UH International Symposium”



UNIVERSITY of HAWAI‘I® NEWS

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Space science takes center stage at UH international symposium

UH News » Research » Space science takes center...

September 30, 2025 UH News

Reading time: 2 minutes

The University of Hawai‘i showcased its growing role in global astronomy and space research by hosting an international symposium, September 22–24, bringing together leading experts from Japan and Hawai‘i to explore the future of ground- and space-based science and technology.

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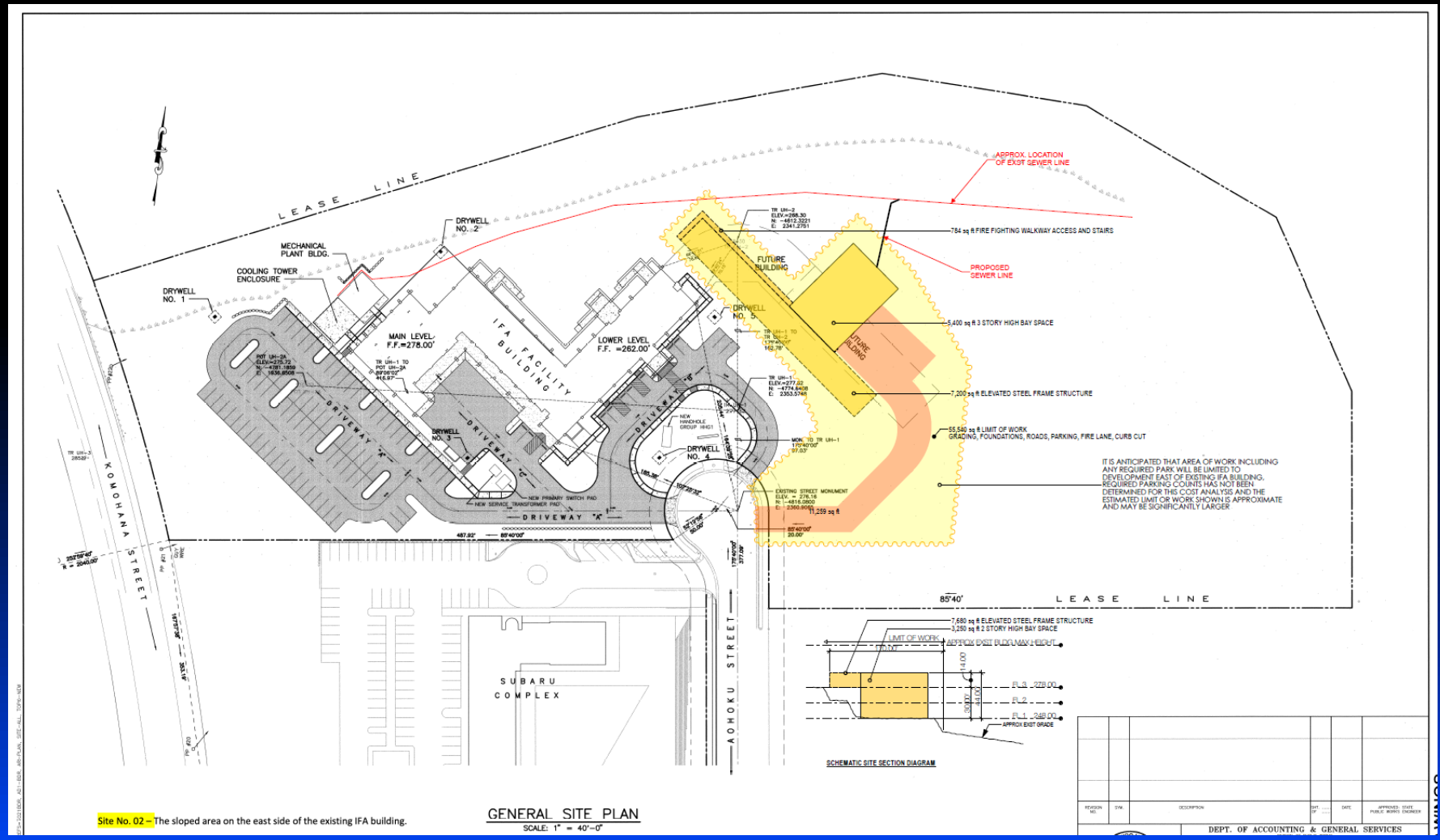
Most Popular

October 2025

UH News, 2025-09-30: https://www.hawaii.edu/news/2025/09/30/space-science-symposium/

Proposed New SSEI Building Next to IfA-Hilo



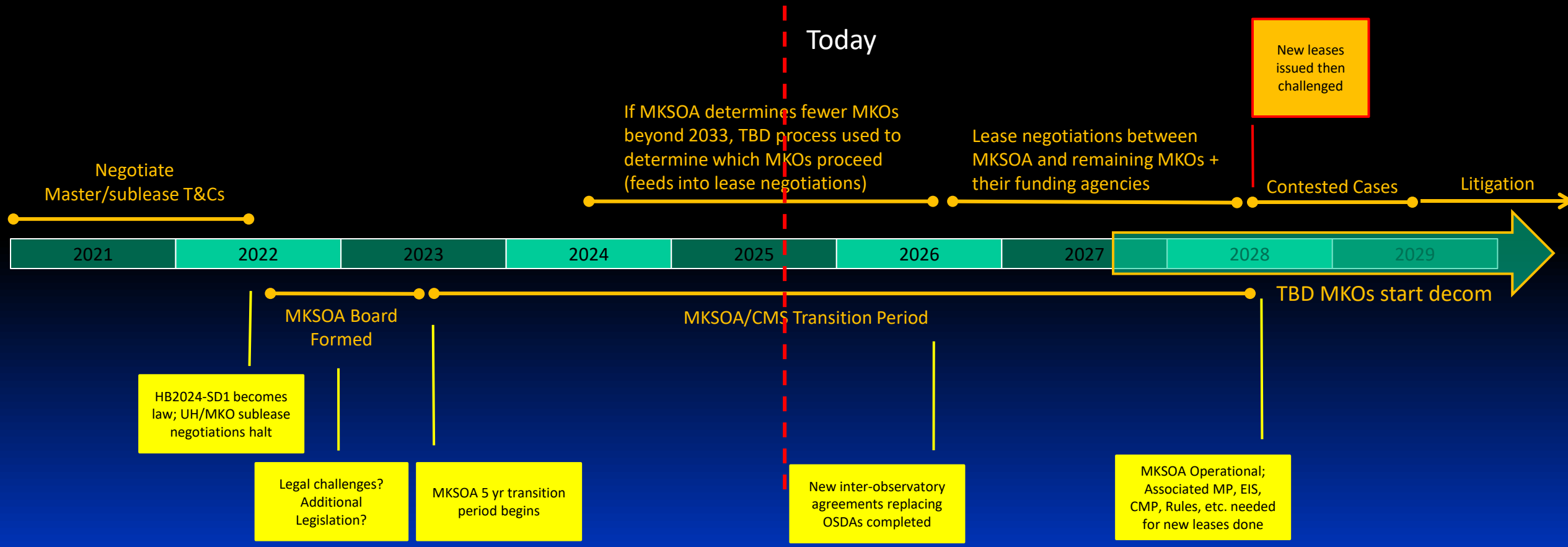
Site No. 02 – The sloped area on the east side of the existing IFA building.

Various Issues Ahead in the UH → MKSOA Transition

PENDING ISSUES KEY TO MKSOA'S MANAGEMENT PLAN AND TIMELINE		
How does MKSOA hold its property interest?*	Conservation district oversight (HRS 183C)*	LUC authorities (HRS 205)**
CDUP Transfers*	Leasing criteria and process (HRS 171)**	EIS Requirements*
Utilization of UH plans and rules*	MKSOA Organization (Structure, RCUH, Advisory Groups, etc.)	Astronomy as a policy of the State (What does this look like on the ground? What is the role of UH/IfA?)
Staff, Asset, Liability Transfers**	Move IfA from UHM to UHH**	Other (N=?)

Table Courtesy Greg Chun

Today - Some Key Schedule Milestones Under the UH → MKSOA Transition



IfA's Evolving Mission

- Various initiatives reflect evolution and growth at IfA, as we plan a future grounded in education, research, technology, and community
  - Hiring 10 new IfA faculty plus 8 collaborating on new Space Science & Engineering (SSEI) faculty
  - IfA as a Native Hawaiian Place of Learning, with an emphasis on local student support and engagement
  - Launching new SSEI building adjacent to IfA-Hilo to increase capacity for tech-dev, instrumentation, education, internships
  - Engineering degree pathway at UH Hilo, substantially enabled via IfA

A10 Tuesday, June 6, 2023 Hawaii Tribune-Herald

NEWS

Kamehameha Schools grad wins surprise scholarship

By MICHAEL BRESTOVANSKY
Hawaii Tribune-Herald

A Kamehameha Schools Hawaii senior was surprised Monday with a $10,000 scholarship to pursue a degree in astrophysics at Yale University.

Ciana-Lei Bence, who graduated from Kamehameha Schools this year, is a member of the Maunakea Scholars program, a partnership by the Maunakea Observatories and the state Department of Education that pairs students at participating Hawaii high schools with astronomer mentors to develop research projects and grant them the opportunity to use the Maunakea telescopes to observe space.

"Before, I was interested in philosophy and anthropology, because I wanted to learn more about where we all came from," Bence said. "But I started to lean toward astronomy, because that's where all that started."

Mentored by Doug Simons, the director of the University of Hawaii's Institute for Astronomy, Bence entered the East Hawaii District Science and Engineering Fair earlier this year with an ambitious project: "It was investigating the mass evolution patterns of active galactic nuclei," she said.

Bence used the W. M. Keck Observatory to observe a distant quasar in conjunction with a host of archival data from several observatories. By analysing the spectrography of distant galaxies, Bence hoped to find evidence that would bolster theories for the M-Sigma relation, an observed correlation between the mass of galactic supermassive black holes and the velocities of the stars surrounding them.

On the strength of that project — which won first place in the fair's Physics and Astronomy division — Bence was invited to participate last month in the International Science and Engineering Fair, the world's largest high school science fair.

In recognition of her performance, Hilo Rep. Richard Onishi presented Bence a certificate of achievement Monday, calling her a "shining beacon of inspiration" for Hawaii students.

But Simons shocked Bence with another certificate: the Maunakea Scholars' Hokuala Scholarship, a $10,000 award for the top-performing seniors in the program who are pursuing an astronomy-related college degree.

"It's a testament to the really hard work (she's done)," Simons said, adding that Bence's speed at picking up complicated concepts is extraordinary.

Simons suggested that the results of the project could end up being professionally published, as other Maunakea Scholars' work has been.

"She's been racking up awards for now," Simons said. "Getting published can wait."

Bence said she will attend Yale University in the fall in the hopes of eventually obtaining a doctorate in astrophysics.

"I'm really excited," Bence said. "I met a lot of cool people when I visited (Yale). … There's a big Native Hawaiian community there, and other Native American groups, too. It felt a lot like home."

Meanwhile, Simons said that the Maunakea Scholars program is nearing its 1,000th student participant this year, and Onishi said he hopes to work with the state Legislature to pursue additional funding for the program.

Email Michael Brestovansky at mbrestovansky@hawaiitribune-herald.com.

Tribune-Herald

Ciana-Lei Bence and Hilo Rep. Richard Onishi pose for a photo Monday.

- *Despite uncertainties about Maunakea astronomy, IfA remains steadfast in building our capacity, supporting our community, and partnering via innovative programs focused on advancing the futures of our keiki (ʻImiloa, Ka Haka ʻUla, Nāwahī, UHH engineering, Maunakea Observatories, Akamai Internships, Maunakea Scholars, etc.)*

Mahalo