HB 2047 – RELATING TO THE INSTITUTE FOR ASTRONOMY

Chair McKelvey, Vice Chair Hashem, and members of the committee:

Thank you for this opportunity to provide testimony on HB 2047, which would transfer the Institute for Astronomy (IfA) from the University of Hawai‘i at Mānoa (UHM) to the University of Hawai‘i at Hilo (UHH). The university appreciates the intent of this bill to further enhance IfA’s connection to the Hawai‘i Island community and its contribution to the Hawai‘i Island economy. However, we are concerned about certain unintended consequences of pursuing that goal to the degree and at the rate implied by this bill. The university therefore opposes HB 2047 in its current form.

IfA has significant operations on three islands. It has office, classroom, laboratory, and machine shop facilities in Mānoa, O‘ahu (approximately 51,000 square feet), Pukalani, Maui (approximately 15,000 square feet), and Hilo, Hawai‘i (approximately 36,000 square feet). There are approximately 100 IfA faculty, staff, and graduate student employees on O‘ahu, 30 on Maui, and 50 on Hawai‘i Island. The university, through IfA, owns and operates observatories on Haleakalā, Maunakea, and Maunaloa, and has additional observing time and research collaborations in observatories operated by other parties, including the soon-to-be-completed Daniel K. Inouye Solar Telescope and other telescopes on Haleakalā as well the Maunakea observatories. IfA faculty teach undergraduate and graduate classes on both the Mānoa and Hilo campuses and advise graduate students resident on both islands. Faculty and graduate students conduct outreach programs to K-12 students and the general public on O‘ahu, Maui, and Hawai‘i Island, and to a lesser extent statewide.

IfA greatly values its connection to the Hawai‘i Island community. There is a significant faculty presence in Hilo, with a particular focus in research and development of highly sophisticated astronomical instrumentation, and a number of our graduate students choose to pursue their research there. Through an MOU between IfA and UHH, IfA faculty fulfill a portion of their teaching commitment in UHH’s undergraduate astronomy program. IfA collaborates closely with colleagues at UHH in teaching and outreach and
is working to enhance collaboration in the operation of telescopes. IfA’s significant
growth in Hilo and on Maui over the past 20 years has been good for those communities
and good for the IfA.

However, IfA, UH and the state also derive important benefits from IfA’s position as a
unit of UHM, the state’s flagship research university. IfA faculty and graduate students
provide most of the instruction in UHM’s successful undergraduate degree programs in
astronomy and astrophysics, which have been developed in coordination with UHH, so
as to minimize programmatic duplication. Currently there are approximately 54 majors.
Many more Mānoa students – approximately 350 per year, some of whom take more
than one course – enroll in astronomy courses as electives or to meet distribution
requirements. Being part of the flagship research university also enhances opportunities
for IfA faculty to collaborate with colleagues in other disciplines, such as physics,
chemistry, biology (IfA successfully operated a NASA-funded Astrobiology Institute for
many years), and computer and data sciences. IfA’s Pan-STARRS telescopes are the
largest user of server space in UH’s Information Technology Center, and IfA faculty
expertise is an important contributor to UH’s efforts in this high-priority area and the
startup of advanced programming in data sciences.

In addition to the programmatic aspects discussed above, we do have some serious
concerns about certain practical aspects. Many IfA faculty and staff are not in a position
to relocate from O’ahu or Maui to Hawai’i Island for a wide range of personal and
professional reasons, including spouses’ employment, school enrollment, home
ownership, and other family commitments and factors. In addition, IfA’s current facilities
in Hilo could accommodate only a small fraction of the faculty, staff, shops, and labs
that are currently in Mānoa and Pukalani. It is unclear how the approximately 66,000
square feet of space that IfA currently occupies in Mānoa and Pukalani could be
replaced and at what costs – which would come at the expense of other university
facility needs.

In conclusion, IfA is committed to Hawai’i Island and continued development of
research, teaching, and service there. However, this would be best accomplished over
time and in balance with opportunities and commitments on O’ahu and Maui. We
therefore respectfully oppose HB 2047 in its current form.