

Mathematics in Hawai'i

AMATYC Summer Institute 2006

by James A. Schumaker

Hawai'i Community College (HawCC) was once again privileged to host the (fifth biennial) Mathematics in Hawai'i Summer Institute. Beginning with an opening reception to orient the participants, a guest speaker, Kihei Nahale'a (HawCC Hawaiian Culture and Language instructor) spoke to the group about many of the local customs and traditions. Along with being served a light deli-dinner, everyone was challenged to a Hawai'i civics quiz and a human scavenger hunt.

On Tuesday morning, the real business of the institute began in earnest with a morning discussion by Darcy Bevens, from the Center for the Active Study of Volcanoes (CSAV). She explained some of the geological phenomenon the group would see later, as well as detailing many of her experiences in both the educational and scientific field. The majority of the participants then went to the Hawai'i Volcanoes National Park on a 4-hr field trip. Darcy continued to talk about the various features of the Big Island as the convoy made periodic roadside stops for everyone get out and experience the park first-hand.

Wednesday began with everyone being transported to the Univ. of Hawai'i Institute for Astronomy (UH-IFA). Mr. Charles P. (Pat) McKeague reprised his role as lead instructor/facilitator by delivering a 45-minute focus talk on some of the mathematics associated with the previous day's geology activities. Following this, Dr. Bobby Bus gave a wonderful lecture on planetary geology and asteroids. Afterwards all were allowed to rest before taking a second field-trip, this time up the slopes of Mauna Kea to the 9000' level. Met by Dan Birchall, another member of the UH-IFA, the group was treated to a nice, hot-dinner inside the cozy climes of the Hale Pohaku cafeteria. As dark set in, a number of telescopes (supplied by the Onizuka International Center for Astronomy Visitor's Information Station) allowed most everybody to spend more than an hour star-gazing before having to descend back to sea-level.



Thursday's topic was oceanography and the marine sciences. After Pat McKeague initiated the morning with another focus-talk on some of the mathematics involved in the astronomy program from the day before, Mr. George Curtis (UHH. Kalakaua Marine Education Center) spoke to us about a wide-range of endeavors he had been personally involved in over the past 30-40 years. Later Mr. Curtis complemented his morning presentation by guiding the group on another field trip to downtown Hilo's Pacific Tsunami Museum. The afternoon ended early enough that some of the more stout-hearted, adventurous participants were taken for an extra-curricular snorkeling trip at Richardson's Beach Park.

The last day, Friday arrived with inclement weather from the remnants of Hurricane Daniel. Undaunted, Pat McKeague once again presented the group with one last focus-talk on the mathematics relevant to tsunamis. Roberta Brashear-Kaulfers (HawCC Biology/botany instructor) then addressed the crowd ever so briefly about their upcoming task of doing a transect (statistical) survey of introduced vs indigenous/native plants. A short van ride took those willing to brave the elements up to the Univ. of Hawai'i at Hilo campus, where she led a tour of the HawCC's Forest Team gardens and then set them loose to tend to their survey. The rain abated just long enough to spare everyone from becoming water-logged, and to return in good spirits for a final Aloha Lunch.