

Hawai'i Center for Advancing Systemic Heliophysics Education (HI CA\$HEd)

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The Hawai'i Center for Advancing Systemic Heliophysics Education (HI CA\$HEd) operates under the umbrella of the Center for Computational Heliophysics in Hawai'i (C2H2) at the Institute for Astronomy. In the HI-CA\$HEd, we undertake vigorous activities on all levels of engagement aimed at educating the students, teachers, and the general public of Hawai'i about: (i) the Sun, interplanetary space, and most of the rest of the Universe are made up of plasma, and how this plasma interacts with, and how it is coupled to, electro-magnetic forces; (ii) the variability of the Sun in every wavelength, and the manner by which that variability manifests itself in the solar magnetic field, bulk plasma flow (the solar wind), and energetic particles; and (iii) the harsh conditions in the space environment, which may pose significant risks for the journey of exploration.

Target group is middle and high school teachers and their students, especially females, Native Hawai'ians and those at-risk. Teacher/student heliophysics workshops are being held annually on each island. After conducting these workshops locally in Hawai'i for this year, we will conduct them in the Pacific Islands (Federated State of Micronesia) and at the national meeting of the American Association of Physics Teachers.

We are also providing mentors for motivated students to conduct research projects at the HI STAR (Hawai'i Student Teacher Astronomy Research) summer program, now in its fourth summer and sponsored by our Institute for Astronomy and our University of Hawai'i NASA Astrobiology team.

Our public outreach component includes public lectures held in conjunction with the workshops, expanding the outreach section of the current research website of C2H2 (<http://c2h2.ifa.hawaii.edu>). We believe that everyone should be exposed to heliophysics and its significance to their lives and use public and school libraries as venues to do this. Heliophysics exhibits and activities are shared at annual events such as IfA's Open House on Oahu, AstroDay in Hilo (Big Island), and Maui-IfA's Open House.

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