

Carlos Agustin Gai

Institute for Astronomy
University of Hawaii

Personal: +1 (808) 232-4828
E-mail: cgai@hawaii.edu

ACADEMIC TRAINING	University of Hawai'i at Manoa , Honolulu, HI, United States B.S. in Physics (Candidate), 2024 B.S. in Astrophysics (Candidate), 2024	
RESEARCH INTERESTS	<ul style="list-style-type: none">• Applications of Deep Learning and CNNs in Astrophysical Analysis• Non-thermal Stellar energization processes.• Kinetic theory and simulations of space and astrophysical plasmas• Magnetic reconnection in collisionless plasma turbulence	
PROFESSIONAL EXPERIENCE	Computational Plasma Researcher <i>Advisor:</i> Dr. Colby Haggerty University of Hawai'i – Institute for Astronomy - Studying collisionless plasma phenomena - Shocks Magnetic Reconnection	Jul. 2022–Present
	Learning Assistant University of Hawai'i at Manoa – Department of Physics and Astronomy - With Prof. Michael Nassir - Teaching Introductory physics courses	2022
	English tutor OkPanda (Online English Learning Platform from Japan) - Teaching English to Japanese students - Prepared students for TOEFL and IELTS	2018–2021
	Japanese Tutor Personal Office in Argentina - Prepared Students for JLPT exams N5 ~ N1	2018–2020
HONORS AND AWARDS	UROP, Funding Recipient Funding to do research on Magnetic Reconnection	2023
	REU, Institute for Astronomy Research Experience where I got paid to work on astrophysical plasmas and got to travel to a conference and observatories to give a talk. Poster and Talk	2022
	ISS Spring Forward Scholarship Scholarship from International Student Services	2022
	ISS Internship Scholarship Scholarship (paid) from International Student Services for Summer Internship	2021
	Marie and Victor Cole Scholarship for Astrophysics Majors Scholarship	2020
	International Merit Award Scholarship	2020
	Opportunities Scholarship by EducationUSA, Fulbright	2019

ACTIVITIES
FOR THE
SCIENTIFIC
COMMUNITY

Member of the Undergraduate Committee of Astrophysics Students (2023–Present).

Vicepresident of the Society of Physics UH Manoa Chapter (2023–Present).

Volunteer for Institute for Astronomy’s Outreach Event, IfA Open House

Volunteer for Institute for Astronomy’s Outreach Event, Bishop Museum Show Presenter

Volunteer for Institute for Astronomy’s Outreach Event, Makahiki Astronomy Games

CONFERENCE
PROCEEDINGS

1. **CA Giai**; Haggerty C.C.; P. Cassak; Shay M. Guide Field Magnetic Reconnection in High Beta Plasmas,

WHITE PAPERS

- (a) Giai C.A. et. al., ”The reduction of the outflow speed in High Beta Guide Field Magnetic Reconnection”

PRESENTATIONS

- (a) ”Guide-Field Magnetic Reconnection Outflow Speed in High Beta Plasmas”, Giai, C.A.; Haggerty, C.C.; Paul. A. Cassak; Shay, M. A.; Fall AGU Conference, Chicago, IL, Dec. 2022. [Talkhere](#)

COMPUTATIONAL
SKILLS

- Python (Astropy, TensorFlow, Astroqueries, numpy, scipy, pandas, matplotlib)
- Matlab (Low level)
- Java
- HTML
- Unix (Bash)

PROFESSIONAL
MEMBERSHIPS

- Member of the American Geophysical Union, 2022 - present

REFERENCES

- (a) Colby Haggerty
Assistant Professor
Institute for Astronomy
University of Hawai’i at Manoa
colbyh@hawaii.edu
- (b) Michael Shay
Professor
Department of Physics and Astronomy
University of Delaware
shay@udel.edu
(302) 831-2677
- (c) Paul Cassak
Professor
Department of Physics and Astronomy
West Virginia University
pacassak@mix.wvu.edu