

# **Pacific-basin Science, Technology, Engineering, Arts & Mathematics STEAM Teaching Conference**

Kohala Coast, September 13-16, 2018



## *Conference Co-Chairs*

Timothy F. Slater, Ph.D.  
University of Wyoming - Laramie

Richard Jones, Ph.D.  
University of Hawai'i - West Oahu



## GENEROUS MAHALOS

The **Pacific-basin STEAM Teaching Conference** is hosted by HAWAIICON.COM and the CAPER CENTER FOR ASTRONOMY & PHYSICS EDUCATION RESEARCH

[www.CAPERteam.com/pstc](http://www.CAPERteam.com/pstc)

We greatly appreciate the generous support given to us by:

Jessica Gauthier, HawaiiCon Con Chair *and* Stephanie Slater, HawaiiCon Programming Chair, among many others

Financial support provided in part by:

- ✓ The University of Wyoming
- ✓ University of Hawai'i – West Oahu
- ✓ Hawai'i Department of Education
- ✓ PonoPubs.com
- ✓ CAPERteam.com

*and the many presenters who covered their own travel costs and donated their time to this important endeavor.*

## ANTICIPATED DAILY SCHEDULE

### **Thursday**

Thur., 9:00

#### **Walking Tour of Mauni Lani's Flora & Fauna**

Danny Akaka

*Take an indepth grounds tour of Mauna Lani who serves as host to birds, flowering plants, and fish that flourish in Hawaii.*

PRO TIP: Kindly check the  
POCKET GUIDE found at  
the registration desk for  
an updated and more  
accurate schedule

Thur., 10:00 (Puna Room)

#### **Educators' & Academics' Coffee Hour**

Rick Jones

*Join HawaiiCon's diverse group of educators for networking and fellowship.*

Thur., 11:00 (Puna Room)

#### **Keiki STEAM Superheroes**

Jackie Collier

*Do your students love superheroes? Capitalize on their inherent interest to teach STEAM concepts.*

Thur., 12:00 (Puna Room)

#### **Newton's Drag Race**

Rick Jones

*Let's build and race balloon powered cars to master Netwon's Laws of Motion*

Thur., 1:00 (Puna Room)

#### **Master the Force (of Motion)**

Rick Jones

*Become a Jedi and "Mater the Force" of static and current electricity. Roll aluminum cans, deflect balanced wood meter sticks, and lift paper and pepper packets and "control the force."*

Thur., 2:00 (Ballrooms 1 & 2)

**STEAM Education Townhall**

Herbert Jefferson, Jr., Luciana Carro, Elinor Hampson,  
Aaron Sickel, among others

*Actors, entertainers, engineers, filmmakers, educators, and parents all hope students have more opportunities to learn STEAM concepts. What does that look like from different perspectives?*

Thur., 2:30

**Tales of Old Hawai'i in the Cottage**

Danny Akaka

*Talk story about the diligent caretakes descended from royal families-- King Kamehameha III to the Parker Ranch owners--who have long overseen these ancient nearby fishponds.*

Thur., 3:00 (Puna Room)

**How's Your Digitally Literacy?**

Tim Slater

*Interpreting photographs, illustrations, charts, and graphs require practice. How many of these graphics can you accurately interpret?*

Thur., 3:00 (Kohala Room)

**Searching for Life in the Universe Panel**

Kathy Guyon, Olivier Guyon, & Gary Fujihara

*Are we really alone in the Universe? Our expert science panelists debate the extent of life in the universe and how we might someday travel among the distant stars.*

Thur., 4:00 (Hale HoAloha Holodeck)

**Hawaiian Wayfinding and the World Wide Voyage with Pwo Navigator Kalepa Baybayan**

*A Pwo master navigator explains how Hawaiians are able to travel the landmark-free ocean without modern technological instruments using only the wind, waves, and stars.*

Thur., 4:00 (Puna Room)

**CosPlay on the Cheap**

Faculty from Hawaiian Academy of Arts & Sciences

*Everyone loves to cosplay, but it can be expensive if you're not careful. How can educators support costuming without breaking the bank?*

Thur., 5:00 (Puna Room)

**Teaching with Comics**

Mike Sado

*Everyone loves comic books, but how can you use them to learn important life lessons? Our HawaiiCon comics track lead, Mike Sado from Enjoy Comics, explains how.*

Thur., 5:00 (Puna Room)

**Influence of Modern Day Gaming Panel**

Randall Jensen, Steve Rabitsch, & Joshua Horn

*Gaming isn't just for fun; gaming has far reaching impacts on popular culture, language, and societal values.*

Thur., 6:00 (Ballroom 3)

**Educators' and Academics Welcome Reception**

7:00pm – until ?

*Evenings, beginning at 7pm, programming, gaming, dancing, socializing, and fun-sessions on and around the Ballroom lanai.*

## **Friday**

Fri., 9:00 (Puna Room)

### **Mathematics and Exploding Dots**

Veny Liu

*Exploding dots is an astounding mathematical story that swiftly takes you on a wondrous journey through grade school arithmetic, polynomial algebra, and infinite sums to unsolved problems baffling mathematicians to this day.*

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Fri., 10:00 (Puna Room)

### **Teaching and Learning through Video Making**

Duke Kell, West Hawaii Academy

*You can't just tell students to go make a video; instead, we'll tell you how to structure and scaffold the learning experience for success.*

Fri., 10:00 (Kohala Room)

### **From Space to Cyberspace: Astronomy and Science in the 21st Century**

George Djorgovski

*If astronomers rarely spend time looking through the eyepiece atop a lonely mountain top, what is it that astronomers actually do?*

Fri., 11:00 (Puna Room)

### **Science is a Verb**

Rick Jones

*Who doesn't love M&M candies? Engage in real science and the discover how scientists control variables when they conduct experiments.*

Fri., 11:00 (Hamakua Room)

### **Will Robots Rule the Universe?**

Liz Fairchild, Mimi Marinucci, & Carire Cole

*Will we own the robots of the future or will the robots be our overlords?*

Fri., 12:00 (Kohala Room)

**Asteroids, Meteorites, & Comets, Oh My! Panel**

Gary Fujihara, Kathy Guyon, & Tim Slater

*The solar system is more than just a star with some orbiting planets! The bits and pieces tell a story that you don't want to miss.*

Fri., 1:00 (Puna Room)

**Amplifying Science for Everyone**

Michelle Buck

*Amplify Science' is a digitally-enhanced approach to learning about science that inspires students to think, read, write, and argue as they learn the concepts, knowledge, and skills needed to master standards in science.*

Fri., 2:00 (Puna Room)

**Following, Monitoring, & Using Stormwater**

Ashley Morrow

Follow the Drop Stormwater curriculum and app supports students in learning to monitor and manage water run-off at their school with the goals of reducing local erosion, creating a rain garden, and managing rainwater catchment.

Fri., 2:00 (Kohala Room)

**Living Off of the Land: Paving the way to Mars**

Kyla Defore

*It's expensive to launch raw building materials into space for future colonies. Which new, groundbreaking construction technologies are around the corner that could support future colonies on the Moon and Mars?*

Fri., 3:00 (Hamakua Room)

**Learning Pacific-basin Languages**

Keao NeSmith



Fri., 3:00 (Kohala Room)

**The Future of Energy and Aquatic Resources in Hawai'i**

Keith Olsen (NELHA) & Julian Stevens (Kampachi Farms)  
*Scientists from the National Energy Lab of Hawaii (NELHA) and Kampachi Farms describe the latest groundbreaking research at the Nexus of Water, Food Energy and development endeavors to make a brighter future for Hawaii.*

Fri., 4:00 (Puna Room)

**Set Phasers to 'Learn' with Star Trek**

Stefan Rabitsch

*A lesson from Star Trek is to boldly challenge your preconceptions before they challenge you. How can Star Trek improve your critical thinking skills?*

Fri., 5:00 (Puna Room)

**Design Thinking in STEAM Endeavors: Practical Approaches to Design Thinking in the Classroom**

Aaron Sickel, DOE STEM Education Office

*Design thinking has been a popular model of problem solving in a variety of fields, including architecture, visual arts, business, and organizational development. As it crosses over into the classroom so that students have opportunities to solve problems in the world around them, many questions arise for the teacher. How can I facilitate design thinking when I'm short on time and resources, while I'm also trying to address learning standards, and with the understanding that students need various levels of support? In this session, we will discuss practical approaches to implementing design thinking in the classroom. Participants will see flexibility in the various ways they can help students 'think like designers' while meeting other educational objectives.*

7:00pm – until ?

*Evenings, beginning at 7pm, programming, gaming, dancing, socializing, and fun-sessions on and around the Ballroom lanai.*

## **Saturday**

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Sat., 8:00 (Puna Room)  
**Educators' Coffee Hour**  
Rick Jones

*Join HawaiiCon's diverse group  
of educators for networking and fellowship.*

Sat., 9:00 (Puna Room)  
**The (Magnetic) Force Is Strong in This One**  
Rick Jones

*The electrical and magnetic force is surprisingly strong!  
Learn Jedi tricks for levitating paperclips, defying gravity,  
and using simple motors to demonstrate your mastery of  
the Force.*

Sat., 10:00 (Puna Room)  
**Scienced, SEALed, and Delivered: Science Exploration  
And Literacy**  
Michelle Buck

*Science is more than white lab coats. Learn how scientists  
do their investigations, reading, writing, mele, and have  
FUN! When we're all finished, you will be SCIENCEed,  
SEALed, and Delivered!*

Sat., 10:00 (Puna Room)  
**Astronomy on Maunakea**  
Michael Hoenig

*What are astronomers finding out about our universe from  
the telescopes near the summit of Maunakea?*

Sat., 11:00 (Kohala Room)  
**Misconceptions about Misconceptions**  
Stephanie Slater

*It's not what you don't know that causes you problems  
when learning about science, it is what you don't know that  
isn't so!*

Sat., 12:00 (Puna Room)

**Raspberry Pie Computers You Can Build**

Chester Lowery

*Not all Raspberry Pi is for eating! See how easy it is to build your own powerful computer.*

Sat., 1:00 (Puna Room)

**The Fire Below Us**

Michael Lienau

*An explosive discussion contrasting two of the most active volcanoes in America with volcano survivor and filmmaker Michael Lienau.*

Sat., 1:00 (Puna Room)

**Helping Students: Don't Run Out of STEAM! Making Integration Approachable**

Aaron Sickel

*Want to start including more opportunities for integrated STEAM teaching and learning? Join this session to explore the essential features of STEM learning experiences developed by teachers of all grade levels across the Hawai'i Department of Education. The features are accessible, flexible and approachable for a wide range of integrated learning experiences while giving attention to research on STEAM education. Examine lessons, build upon what you're already doing, and get feedback from colleagues as you consider the design of future STEAM lessons and units!*

Sat. 1:00 (Kohala Room)

**Hawaiian Harry Potter**

Keao NeSmith

*Learn the challenges a Hawaiian linguist runs into when translating science fiction and fantasy stories into Hawaiian. Session includes a reading by the author.*

Sat., 2:00 (Puna Room)

**Science Olympiad, Soon Appearing Near You**

Cindy Fong

*Students from all levels can compete in science Olympiad events, so learn how to host one in your hometown to help kids learn science.*

Sat., 3:00 (Ballroom 3)

**The Importance of Energy, Food, & Cannabis for the Future of Hawai'i (120 min.)**

Richard Ha

*What can be more Aloha than taking care of the health and security of our people and the health of our guests? An extended question and answer session about Hawaiian farming, energy security, TMT, and medicinal cannabis with Uncle Richard Ha.*

Sat., 3:00 (Puna Room)

**Best Astronomy of the Year Panel**

George Djorgovski, Olivier Guyon, Michael Hoenig, Gary Fujihara, among others

*So much has been uncovered about our universe this year. But which discoveries are the most important in astronomy? Our panelists engage in lively debate.*

Sat., 4:00 (Puna Room)

**Taking an Immersive Virtual Field Trip from Home**

Ryan Hollister

*High Resolution Immersive Virtual Field Experiences merge hi-res 360 photospheres, 3D rock models and, along with well-crafted questions to guide your exploration, can provide meaningful learning experiences to faraway lands from the comfort of your own*

Sat., 5:00 (Puna Room)

**Getting to Know Your Galactic Neighbors**

Kathy Guyon & Olivier Guyon

*Not too long ago, exoplanets were ONLY in science fiction books and movies. Astronomers have now identified thousands of exoplanets, including some that could be habitable. Join us to learn how astronomers find exoplanets and learn about the latest exoplanets.*

7:00pm – until ?

Evenings, beginning at 7pm, programming, gaming, dancing, socializing, and fun-sessions on and around the Ballroom lanai.

## **Sunday**

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Sun., 8:00 (Puna Room)  
**The Hot STEAM eVent! The  
Mad Scientist Drop in  
Workshop**

Rick Jones

*In this drop-in session, explore the Smoking Masters of STEAM, as you wander from fumarole to fumarole without toxic gases, doing what volcanologists do.*

Sun., 9:00 (Puna Room)  
**The Hot STEAM eVent! The Mad Scientist Drop in  
Workshop (continues with hot coffee)**

Rick Jones

*In this drop-in session, explore the Smoking Masters of STEAM, as you wander from fumarole to fumarole without toxic gases, doing what volcanologists do.*

Sun., 10:00 (Ballroom 3)  
**Learn to Draw Chibi Superheroes!**

Teachers always have to sketch, but have you ever learned how? This how-to-session is precisely what you need.

Sun., 11:00 (Kohala Room)  
**Falling Stars and Meteorites**

Gary Fujihara

*Ever touched a rock from outer space? Big Kahuna's meteorite expert explains the variety of falling stars that survive the fiery trip to Earth's surface.*

Sun., 11:00 (Puna Room)  
**Creating Superhero STEAM Lessons**

Jackie Collier

Sun., 12:00 (Puna Room)  
**Kilauea Erupts**

Phil Ong

*For months, Kilauea has been teaching scientists about the unpredictable science and beauty of volcanoes. Big Island scientist Phil Ong answers all your questions.*

Sun., 1:00 (Puna Room)

**Easy-botics Robotics for Everyone**

Chester Lowery

*Explore and build simple and fun robots from Hawaii's own Easy-Botics.*

Sun., 2:00 (Puna Room)

**Moon Rocks for Teachers in Hawaii (3 hrs)**

Karen Roark

*In this special 3-hr certification session, attendees will learn how to arrange for a loan of one of our most precious national treasures--rocks from the Moon brought back by NASA's Apollo Astronauts. Caring for these rocks requires special protocols to*

Sun., 2:00 (Hamakua Room)

**Eclipses in Science Fiction**

Stephanie Slater

*The event of the Moon blocking out the Sun during an eclipse is for many people a traumatic experience. How have science fiction authors used the magic of an eclipse to enhance their stories?*

Sun., 3:00 (Kohala Room)

**Galileo's Universe**

Tim Slater

*Galileo disrupted our view of our place in the universe using his tiny telescope. What did he see that changed our worldview so drastically?*

Sun., 5:00 (Hamakua Room)

**Unresolved Questions about Morals and Values in**

**Black Panther** Mimi Marinucci, Steve Bien, Jim Okapal, Brooke Carson, Timothy Harvie, Tim Slater, Clint Jones, among others

*Should the Wakandans now, at long last, help the rest of humanity? At what cost?*

## TWO WAYS FOR TEACHERS TO EARTH PROFESSIONAL DEVELOPMENT CREDITS

FREE! Are you interested in no-cost **CEU Continuing Education Units** from the University of Hawaii West Oahu for your participation in the Pacific-Basin STEAM Teaching Conference? If so, be sure to drop by the PSTC Registration Desk outside the Ballrooms and sign-up for CEUs by talking with Rick Jones or email Dr. Jones at [rmjones7@hawaii.edu](mailto:rmjones7@hawaii.edu). We will need your name, email, phone, and home address. There is an easy to fill out form on the next page you can tear out. You will be able to earn up to 20 hours of CEU's in STEAM Education based on the number of STEAM focused sessions that you attend and fully participate in.



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of HAWAII®  
WEST O'AHU

EXPENSIVE! Would you like to earn graduate semester credits from the University of Wyoming that can be applied to your Masters degree or to



move across the pay scale index? PSTC participants are eligible to enroll in three **graduate semester credits** of University of Wyoming's ASTR 5870-41: *Advanced Science Teaching Through Science Fiction* (CRN #16559). To enroll, simply call the UW Distance Education Office at (307) 766-4300 and tell them you'd like to enroll in CRN #16559 as a non-degree seeking graduate student! Questions? As Dr. Tim Slater at [tslater@uwyo.edu](mailto:tslater@uwyo.edu)



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## FREE CEU CONTINUING EDUCATION UNITS

You are eligible to earn 5.0 CEUs for each day you attend the PSTC Conference, up to a maximum of 20.0 CEUs.

Tear out this page and submit to the registration desk before you leave the conference OR contact Dr. Jones at [rmjones7@hawaii.edu](mailto:rmjones7@hawaii.edu)

Name

Mailing Address

City, State, Zip

Email

Phone Number

*Please indicate which days you were in attendance at PSTC by checking the boxes.*

Thursday

Friday

Saturday

Sunday





## PSTC PRO-TIPS

#1: Hawai'i can be hot, really hot. And it rains unexpectedly. So, we suggest wearing very casual clothing for this conference. Shorts are perfectly acceptable. Sandals and slip-ahs are acceptable too. Kindly note it can get a bit chilly in the evenings and in the all-to-often over air-conditioned meeting rooms, so having a casual light jacket or pull-over is a reasonable thing to bring along.

#2: When you meet a person younger than you whom you don't know, they might address you as "Uncle" or "Auntie." This is a sign of respect here on Big Island. You should also feel free to greet others by saying "Aloha" and showing your appreciation by saying "Mahalo." Greeting people with a hug and a kiss on the cheek is also common on Big Island, so don't be surprised. Moreover, using local Hawaiian words is not viewed as cultural appropriation here, but is instead considered polite.

#3 In addition to the 30 hours of PSTC programming, there is another 30 hours of programming for university science and philosophy professors you might enjoy, and 100 hours of additional programming that includes question and answer sessions with celebrities, filmmakers, authors, game inventors, and snorkeling tours, and, and, and.... a beach. Your PSTC registration gets you access to all of this AND the opportunity to earn professional development credits. We double-dog dare you to be bored!

#4: Hawaii is very casual, and "island-time" really exists. As such, schedules are constantly in flux, and sometimes it is hard to keep track of what is happening when.

We'd like to keep you updated by sending you occasional text messages to your phone. Simply text the phrase @hc-pstc to the number 81010 to get conference text message updates.

## BIOGRAPHICAL SKETCHES OF PRESENTERS (listed alphabetically)

DANNY AKAKA

dakaka@maunalani.com

A well-known story teller, Danny Kaniela Akaka is the Director of Cultural Affairs at the Mauna Lani Bay Resort and dedicated to perpetuating the culture, the essence, and the Spirit of Hawai'i.



KALEPA BAYBAYAN

kalepa@pvshawaii.org

Born and raised in Lahaina, Chad Kālepa Baybayan first sailed on Hōkūle'a in 1975 and has sailed on all major Hōkūle'a voyages since. Kālepa has served as captain on Hōkūle'a as well as voyaging canoes Hawai'i'iloa and Hōkūalaka'i. He currently serves as the

Navigator in Residence at the 'Imiloa Astronomy Center of Hawai'i developing wayfinding activities, curriculum materials, and conducting outreach. In 2007, Kālepa was initiated into the order of Pwo, the two-thousand-year-old society of deep-sea navigators in Micronesia.

MICHELLE BUCK

msmbuck29@yahoo.com

Michelle Buck, an elementary teacher for over 30 years, has taught in public, private, and charter schools. She also taught on the mainland and in Costa Rica, South Africa, and Korea. The majority of those years, she taught Science



Literacy. Michelle currently works as an Interpretive Guide at Maunakea's Visitor Information Station, the lead presenter for Moanalua Gardens Foundation's "Aloha `Aina" Curriculum, and a Science Consultant and Professional Learning Specialist for Amplify Science. She received Project Learning Tree's Outstanding Educator Award for 2017 and is the recipient of a grant, "Malama Ka Lae."



CARRIE COLE  
carriejcole@gmail.com  
Co-Chair of the Science Fictions, Popular Cultures Academic Conference at HawaiiCon, Dr. Carrie J. Cole is an Associate Professor at the Indiana University of Pennsylvania. She specializes in combat fighting choreography and theatrical productions of

classic science fiction stories.

KYLA DEFORE  
deforeky@hawaii.edu  
Kyla Defore is a Geology & Material Science Technician at the Pacific International Space Center for Exploration Systems (PISCES), a state-funded aerospace agency located in Hilo, HI. Kyla is researching groundbreaking construction technologies that could support future colonies on the Moon and Mars.





GEORGE DJORGOVSKI  
george@astro.caltech.edu  
S. George Djorgovski is a Professor, Department Chair of Astronomy, and the Director of the Center for Data-Driven Discovery at Caltech. He has worked on many topics in astronomy, from globular clusters to dark energy. He was one of the founders of the Virtual Observatory framework, and of the emerging discipline of Astroinformatics. He is a recipient of numerous professional awards and distinctions, and the asteroid 24421 Djorgovski is named in his honor.

CINDY FONG  
cindy.l.fong@gmail.com  
Cindy Fong is a shop and STEAM teacher and Science Olympiad coach at Hilo Intermediate School. She is a passionate geologist and teacher with loads of hands-on activities for students to learn and explore.



GARY FUJIHARA  
fujmon@mac.com  
Gary Fujiahara of Big Kahuna Meteorites is HawaiiCon's PSTC 2018 Marquee Scientist. Prior to creating the Hilo Youth Robotics program and one of the largest *AstroDay* celebrations in the world, Gary was the Science Education and Public Outreach Officer for the Institute for Astronomy (IFA) University of Hawaii and worked as an operator on the Subaru Telescope at Maunakea. When he's not surfing or making music, the Big

Kahuna is off hunting, analyzing, classifying and playing with rocks from out of this world.

OLIVIER GUYON

[oliv.guyon@gmail.com](mailto:oliv.guyon@gmail.com)

Olivier Guyon is a professional astronomer at the Subaru Telescope on Maunakea. He is best known for designing overly complicated expensive astronomical instrumentation optimized for imaging exoplanets. Quite naturally, he is frequently spotted at large telescopes, where he tries to convince his peers to install advanced exoplanet imaging cameras. Olivier and his astronomer wife Kathy enjoy watching Star Trek - original and new series, and the slightly less peaceful BSG.



KATHY GUYON

[kathyr.guyon@gmail.com](mailto:kathyr.guyon@gmail.com)

Kathy Guyon has decades of experience operating and using some of the world's largest ground and space telescopes. Along with her husband, Olivier, also a professional astronomer, she is now working on a citizen scientist project mobilizing the public in finding exoplanets from their backyard with digital cameras. She is also a huge fan of fantasy, and when she was growing up, she called two of the family cats 'Flick' and 'Shea'.

RICHARD HA  
richard@hamakuasprings.com

Uncle Richard Ha, a widely recognized thought leader in the Hawaiian Community continues to manage the generations-long family farm on the Big Island of Hawai'i. Hamakua Springs Country Farms is located in Pepe'ekeo on the Big Island of Hawai'i's Hamakua coast. He is interested in the nexus of agriculture and energy and finding solutions to the Big Island's rising energy costs in a way that helps the "rubbah slippah folks" and everyone else.



ELEANOR HAMPSON  
ehampson@pltw.org  
Eleanor is Project Lead the Way's (PLTW) Director of School Engagement for the state of Hawaii. A graduate of Marist College's (Poughkeepsie, NY) Psychology/Special Education program, Eleanor taught several grades at Waianae Elementary School on Oahu from 2013-2017

before joining PLTW, including implementation of PLTW's elementary program (Launch) as the Launch Lead Teacher.

MICHAEL HOENIG  
mhoenig@gemini.edu  
Dr. Michael Hoenig is a Science Operations Specialist at Gemini Observatory. He did his undergraduate degree in Astrophysics at the University of Sussex (England) in the last millennium, and then went on to do a Ph.D. at the University



of Cambridge where he studied the construction of a wide field infrared camera. When he's not up at the telescope observing the night sky, or reviewing the images back down in Hilo, he likes to paddle canoes, dance Argentine tango or read a good book."



RYAN HOLLISTER  
ryhollister@sbcglobal.net  
Ryan J. Hollister is a veteran geoscience and AP environmental science teacher who serves as Earth Science Integration specialist at Turlock (CA) High School where his ultimate goal is to help shape a citizenry that will solve the air and water quality problems that

plague the San Joaquin Valley. In 2015, he received the Far West Region's Outstanding Earth Science Teacher award from the National Association of Geoscience Teachers.

DAVID KYLE JOHNSON  
davidjohnson@kings.edu  
David Kyle Johnson is a professor of philosophy at King's College in Wilkes-Barre, PA. He is also a professor for The Great Courses, for which he has done three courses: Sci-Phi: Science Fiction as Philosophy (June 2018), The Big Questions of Philosophy (2016) and Exploring Metaphysics (2014). He maintains two blogs for Psychology Today: "A Logical Take" and "Plato on Pop."





RICK JONES  
rmjones7@hawaii.edu  
Co-Chair of the Pacific-basin  
STEAM Teaching Conference,  
Dr. Richard Jones began his  
teaching career in Lihue  
teaching middle school, moving  
to Montana he focused on High  
School, teaching Earth Science,  
Biology and Physics. Since  
earning his doctorate from

Montana State University he has been teaching science  
content courses as well as pre-service teachers science  
methods at the University of Hawaii West Oahu.

DUKE KELL

dkell@whea.net

Duke Kell is a Math teacher at  
West Hawaii Explorations  
Academy. Engaged in  
educational innovation, Duke  
works with amazing students,  
has one of the most beautiful  
office views in the world, and  
has been mistaken for  
Wolverine.



MICHAEL LIENAU

michael@globalnetproductions.com

For nearly 40 years, Michael Lienau has been an award-  
winning filmmaker working in  
documentaries, television,  
feature films, news, corporate,  
government and new media.  
After nearly losing his life at  
Mount St. Helens in 1980,  
Michael became passionate  
about better understanding  
natural disasters and has  
produced films seen on  
National Geographic,



Discovery, PBS and various international networks.



VENY LIU  
venyliu@hawaii.edu  
Dr. Liu is an Assistant Professor of Mathematics at the University of Hawai'i-West O'ahu. She has been part of the Math Teachers' Circle at Hawai'i (MATCH) Leaders for the past 2 years.



CHESTER LOWERY  
chester@easybotics.com  
Chester Lowery is an engineer focused on providing innovative educational robotics products to inspire students to participate in the field of technology. Born on Hawaii island, tinkerer, entrepreneur, engineer, he founded Easybotics LLC in 2009 out of his love for teaching electronics and programing.



ASHLEY MORROW  
ashley@rothecological.com  
Ashley Morrow is the Big Island Program Manager for Roth Ecological Design International (REDI). She supports projects statewide where she specializes in education, outreach, water quality testing, and green infrastructure.



KEAO NESMITH

kumukeao@gmail.com

Dr. Keao NeSmith is a Hawaiian cultural leader and linguist, He has been a Hawaiian language teacher and translator for nearly twenty years and has published several texts in Hawaiian, including a translation of Carroll's Alice's Adventures in Wonderland and Through the Looking-Glass.



KEITH OLSON

keith.olson@hawaii.gov

As both a scientist and a yoga instructor, Keith Olson, Chief Science Officer at the Natural Energy Laboratory of Hawaii Authority (NELHA) began his career developing and manufacturing engine oil additives for Chevron Research and Technology

Company. In 2004, he moved to Hawaii and has been performing water quality analysis at NELHA. Recently, Keith focuses mostly on energy storage and biosecurity projects.

PHIL ONG

Phil.hawaii@gmail.com

American-Brasilian volcanologist Philip Ong manages 'Volcano Discovery Hawai'i. A FaceBook sensation, he provided daily updates as Kilauea eruptions that many locals depended on.





STEFAN RABITSCH  
stefan.rabitsch@uni-graz.at  
Stefan “Steve” Rabitsch is fixed-term assistant professor in American Studies at the University of Graz. A self-declared “Academic Trekkie”, he focuses on American Cultural Studies and Science Fiction Studies across media in his endeavors. His

professorial thesis project received the 2018/19 Fulbright Visiting Scholar Grant in American Studies. His latest book, “Set Phasers to Teach”, is now available on Amazon.

KAREN ROARK  
kcroark@gmail.com  
Dr. Karen Crow Roark is an Education Specialist for NASA. She has been in the educational world for over thirty years working as a teacher, assistant principal, and professional development trainer. She attended Breanu University, Berry College, State University of West Georgia, University of Sarasota, and University of Georgia. She received her Doctorate in Curriculum and Instruction and Educational Leadership and National Board Teacher Certification.



MIKE SADO  
mikesado22@yahoo.com  
Long-standing comic book enthusiast Mike Sado is owner of Enjoy Comics comic book store in Hilo, Hawai'i. Knowledgeable about all things comics and business, Mike also serves on the Board of



Directors for HawaiiCon and leads the HawaiiCon Comics Programming Track.

AARON SICKEL

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