

## 19<sup>th</sup> annual Astronaut Lacy Veach Day of Discovery October 24, 2020, 12:00-1:30 pm, Hawaii standard time a virtual experience...no pre registration needed

Join us....login: https://bit.ly/3i71sxp



- Participate in mini STEM workshops and demonstrations
  - Including NASA Office of STEM Engagement (landing on target, coding to rendezvous with ISS), Hawaii Space Flight Laboratory (rotocopter), Kauai Community College COGS (light painting), Imiloa Astronomy Center (density, convection), National Astronomical Observatory of Japan (galaxy cruise), UH College of Engineering (balloon rocket car, center of gravity), Hawaii Science Teachers Association (polymer bouncing ball, elephant toothpaste), Hawaiian Electric (building an air battery), JPL Solar System Ambassador (Cartesian divers), Oceanit (electrolysis)
- Be inspired by explorers, innovators in mini keynotes and welcome messages
  - Including Astronaut Chris Cassidy (from the space station), Nainoa Thompson, Polynesian Voyaging Society, Astronaut Bill Shepherd (crew member with Lacy), family of Lacy Veach, sponsor, Hawaiian Electric, Astronaut Stan Love, Educator Astronaut Joe Acaba
- Learn about Hawaii's contribution to the STEM work force via "ads"
  - Including highlighting Hawaii past and present residents
- Learn how to register (first come, first serve) for one of 50 Hardware Science STEM Challenge kits and compete for the best submitted video.
- Participate (open to children and adults) in a "galaxy treasure hunt" for answers from the "ads" and workshops ... entries qualify for invitations to join later in a virtual live tour of museums, laboratories, workshops in November and December 2020. Link to questions available at the beginning of the program.
- For further information or for any questions, email: art@higp.Hawaii.edu (http://www.spacegrant.hawaii.edu/)









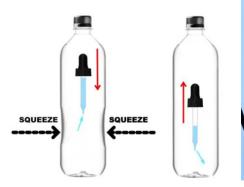














Katie Livingood Education Coordinator Office of STEM Engagement NASA's Johnson Space Center





GALAXY CRUISE: Your Galactic Journey CALAXY CRUISE CRUISE Kumiko Usuda-Sato National Astronomical Observatory of Japan (NAOJ)



an interactive lesson on IGHT PAINTING

















LECTROLYSIS OF WATER

**OXYGEN BUBBLES** 









## Astronaut Lacy Veach Day Galaxy Treasure Hunt answers provided by



Emily Peavy University of **Hawai'i** Hilo Astronomy Educator **'Imiloa** Astronomy Center



Matt Sakumoto Iolani School, Honolulu Medical Doctor Circle Medical, San Francisco



G. Jeffrey Taylor Planetary Geologist Hawai'l Institure of Geophysics and Planetology, University of Hawaii



Kumiko Usuda Astronomer National Astronomical Observatories of Japan



Devin Chu Hilo High School Post Doc, Astronomy and Astrophysics University of California Los Angeles



Sarah Tran Leony University of Oklahoma Electrical and Electronics Engineer Oceanit



Nolan Kamitaki Waiakea High School, Hilo Human Geneticist Harvard Medical School



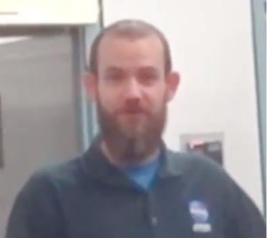
Frances Zhu Aerospace Engineer/Roboticist Hawaii Institute of Geophysics And Planetology



Eisha Tyler Waiakea High School, Hilo Electrical Engineer NASA Jet Propulsion Laboratory



Adria Fung Sacred Hearts Academy, Honolulu Robotics Engineering St. Louis School



Ben Honey Hawaii Preparatory Academy Aerospace Engineer Flight Controller/Space Station NASA Johnson Space Center



Hardware Science is proud to host the HS Tumbler Challenge at Lacy Veach Day 2020! Participants will assemble the HS Tumbler and create a video communicating the project to the audience.

## Register for your FREE kit starting Saturday, October 24, 2020

Enter to win a \$50 Gift Card to Ben Franklin Crafts or Ace Hardware. Challenge is open to grades K-8. Limited to the first 50 sign-ups. One kit per person.

Create a 60 second video communicating the project and key terms GRAVITY, ANGLE, and MOTION. Upload to Instagram, tagging @hardwaresciencehi and add #veachday Or submit your entry via email to melanie.ho@hmstores.com

## Virtual Astronaut Lacy Veach Day



https://www.youtube.com/watch?v=I5KNdspAs6k



https://www.youtube.com/watch?v=wsTL1iG8pWc