



SPRING 2014
FELLOWSHIP & TRAINEESHIP SYMPOSIUM
Saturday, April 26, 2014
University of Hawai'i at Mānoa at POST 723

8:00 Registration and refreshments available

[NOTE: POST 723 will be open for presenters to set up their talks]

9:00 Welcome – Dr. Ed Scott, *Fellowship & Traineeship Program Associate Director*
Hawai'i Space Grant Consortium

Overview of Space Grant Activities – Dr. Luke Flynn, *Director*
Hawai'i Space Grant Consortium

PRESENTATIONS

9:10 Steven Ewers (UHM Fellow) – Robotics for the Design of a Competition Mining Robot with the Purpose of Excavating Simulated Martian Regolith

9:22 Andrew McNichols (UHH Fellow) – Variable Altitude Muon Detection and Energy Dependence of Cosmic-Ray Muons Mechanical and System Design of a UV Spectrometer CubeSat Payload

9:34 Robert Pipes (UHH Fellow) – Variable Altitude Muon Detection and Angular Dependence of Cosmic Ray Muon Lifetime at Medium Altitudes

9:46 Bransen Agu, Dominique Boeder, and Kefa Fernandes (Kaua'i CC Trainees) – Designing a high-speed data collection system with application to spectrographic neutron detection

9:58 Melissa Onishi (UHM Fellow) – Analysis of Landing Trajectory Using Forward Propagation

COFEE BREAK 10:10am – 10:30am [POST 703]

10:30 Marcus Yamaguchi (Kaua'i CC Fellow) – Modification of UV Spectrometer into a Neutron Detector Using Neutron-Sensitive Scintillating Material

10:42 Geoffrey Rehders (UHH Fellow) – Hyperspectral Mapping of Alteration in Halema'uma'u Crater and Kilauea Caldera

10:54 Roberto Ramilo Jr. (UHM Fellow) – The Estimation of Daytime Sleepiness for Astronauts

11:06 Jessica Lee (UHM Fellow) – Infrared Imaging of Craters on Mauna Kea

11:18 Liem Nguyen (UHM Fellow) – Design of a Regolith Collection-Storage-Deposit System for Hawai‘i Lunabot

GROUP PHOTO 11:30am – 11:45am [Entrance of POST Building]

LUNCH BREAK 11:45am – 12:30pm [POST 703]

Poster presentations (POST 703)

- **Brian Chan (UHM Trainee)** – Orthorectification of Infrared Images
- **Lauren Froberg (UHM Trainee)** – Submarine Lavas Discovered off Diamond Head – New Honolulu Volcano?
- **Jamal William Garcia (UHM Trainee)** – Don Juan Pond: A Terrestrial Study of Mars Analogs
- **Kihaakeanu Sai (UHM Trainee)** – Geology of Moons of Jupiter and Saturn
- **Kimberly Teehera (UHM Trainee)** – Lava Tube Microclimates on Mauna Loa

12:30 Lyra Hancock, Gavin Nall, Nick Herrera, Kevin Lee, & Kristin Schupp (Windward CC Trainees) – NASA Student Launch Project

12:42 William Kaeo, Michael Lee, Mitch Mikami, Robert Landgraf, Shane Spencer, Lundy Wyre (Kapi‘olani CC Trainees), Benjamin Barker, & Brandon Fukada (Leeward CC Trainees) – Kapi‘olani CC CanSat Team

12:58 Arvin Niro (UHM Fellow) – Design and Development of a Suspension System used in Rough-Terrain Vehicle Control for Vibration Suppression in Planetary Exploration

1:10 Lee Do (UHM Fellow) – Design, Analysis, and Manufacture of an Active Control Panel with Vibration Suppression on an Autonomous Interplanetary Rover

1:22 Eric Caldwell (UHM Fellow) – Design, Analysis, and Manufacturing of a Hardware-in-the-Loop (HIL) Simulation for the Modeling of an Autonomous Traction Control Apparatus

1:34 End of Symposium!

**THANK YOU FOR YOUR PARTICIPATION AT OUR
SPRING 2014 FELLOWSHIP AND TRAINEESHIP SYMPOSIUM.**

MAHALO NUI LOA & ALOHA!!!

