Scientific Program

8:15 am   ~ Check-in & Breakfast ~

MORNING SESSION  (Watanabe Hall Room 112)

9:00 am   Welcome by Pui Lam (University of Hawai‘i at Mānoa)

*Oli heahea* (Hawaiian chant of welcome)
performed by Lelemia Irvine (University of Hawai‘i at Mānoa)

9:10 am   *Kilauea’s Eruptive Fissures in 2018 – Unsteady as She Goes?*
Bruce Houghton (University of Hawai‘i at Mānoa)

9:40 am   *Ultrafast and Very Small: Discover Nanoscale Magnetism with Picosecond Time Resolution Using X-Rays*
Hendrik Ohldag (Lawrence Berkeley National Laboratory)

10:10 am   *Excursions in Nanophysics*
Klaus Sattler (University of Hawai‘i at Mānoa)

10:40 am   ~ Coffee & Tea Break ~

11:00 am   *Re-envisioning STEM Education Through the Lens of Culture and Place*
Tara O’Neill (University of Hawai‘i at Mānoa)

11:30 am   *Don’t Lecture Me: Tutorial-Based Curricula for Teaching Advanced Placement Physics*
Michael Gearen (Punahou High School, retired)

11:45 am   *Contributing towards Astrophysics and Physics Curriculum Enrichment through LLNL’s Teacher Research Academy*
Tessie Lumabao (Waipahu High School)
12:00 pm  ~ Lunch ~

**AFTERNOON SESSION** (Watanabe Hall Room 112)

1:00 pm  *Applications of Tungsten in Z-pinch Plasma Physics and Fusion*
Alla Safronova (University of Nevada, Reno)

1:30 pm  *Recent Results from ANITA*
Peter Gorham (University of Hawai‘i at Mānoa)

2:00 pm  *The Belle II Experiment & High Energy Physics Research in Hawai‘i*
Kurtis Nishimura (University of Hawai‘i at Mānoa)

2:30 pm  ~ Coffee & Tea Break ~

3:00 pm  *From Quantum Devices to Synthetic Biology – Physics in the Corporate World*
Jim Hollenhorst (Agilent)

3:30 pm  *Imaging Brain Function with MRI*
Andrew Stenger (UHM JABSOM)

4:00 pm  *Waveform Digitizing System On Chip Readout Electronics for Particle Astrophysics Experiments*
Benjamin Rotter (Nalu Scientific)

**POSTER SESSION** (Watanabe Hall Rooms 113 & 114) & **RECEPTION** (walkway)

4:30 pm  Poster presentations are listed on the following page
- 6:00 pm

5:30 pm  ~ Finger Food Reception ~
- 7:00 pm  on walkway outside Watanabe

This meeting is sponsored by the American Physical Society's Far West Section and the Department of Physics and Astronomy with support from the School of Ocean and Earth Science and Technology at the University of Hawai‘i at Mānoa.
POSTER PRESENTATIONS

Wat 113  Investigating r-process Absorption Signatures in Stellar Spectra in Search of r-II Stars
Tino Wells (University of Hawai’i at Hilo)

Matching Near-Earth Asteroids to Main Belt Family Euphrosyne
Patrice Smith (University of Hawai’i at Hilo) and Maria Daniella Douglas (UH Mānoa)

Discovery and Characterization of Distant Solar System Objects
Kyle Steckler (University of Hawai’i at Hilo)

Modeling Magnetic Morphologies of Star-Forming Regions
Kenji Emerson (University of Hawai’i at Hilo)

The Planet of Two Suns
Laura Daclison (Waipahu High School)

Studying Wolf-Rayet and Luminous Blue Variable Stars to Find Evolutionary Connections Though the Mauna Kea Scholars Program
Jean Claude Dumaslan (Waipahu High School)

Don’t Lecture Me; Tutorial-Based Curricula for Teaching Advanced Placement Physics
Michael Gearen (Punahou High School, retired)

Self-Healing of Rhodamine 6G in Polymer Matrices
Yunli Lu and Nicholas Christianson (Hawai’i Pacific University)

Wat 114  Search for Cosmic Ultra-High Energy Neutrinos with ANITA-IV
John Russell (University of Hawai’i at Mānoa)

NuLat: A Compact, Segmented, Mobile, Anti-neutrino Detector
Ryan Dorrill (University of Hawai’i at Mānoa)

Analytical Capabilities of the Advanced Electron Microscopy Center at University of Hawai’i, Mānoa
Kenta Ohtaki (University of Hawai’i at Mānoa)

Search for O-1 Earthquake-like Precursors: a Maximum Entropy-μSR MgO study
Carolus Boekema (San Jose State University)

Beta-Decay Energy Spectrum Fitting with DarkSide-50 Calibration Data
Victor Goicoechea (University of Hawai’i at Mānoa)

LiLand - Lithium Electron Antineutrino Source at KamLAND
Tatjana Miletic (Arcadia University and University of Hawai’i at Mānoa)

Dynamic Temperature Monitor Installation
Olexiy Dvornikov (University of Hawai’i at Mānoa)

Particle Detectors and Anderson Localization: A “Guide” to Improving Particle Detection in Scintillators
Kevin Keefe (University of Hawai’i at Mānoa)

Hawaii WATCHMAN Electronics
Jose Duron (University of Hawai’i at Mānoa)

Atomic Clocks In Space and the GM=tc^3 Cosmology
Louise Riofrio (International Lunar Observatory Association)