

AAPT Meeting April 28, 2018, St. Francis School, 8:45 – 12:00

**NEWS! NEWS!** Thanks to Jim Redmond, we have a new website that is smartphone friendly and has spiffy photos and you can check it out at [Hawaii.aaptsections.org](http://Hawaii.aaptsections.org)

In attendance:

Lisa Agle, (president, St. Francis)  
Michael Jones, (godfather,  
retired)  
Pui Lam, (UH)  
Tessie Lumabao, (Waipahu HS)

Takeshi Nakata, (vice president,  
UH West Oahu)  
Mike Weber, (treasurer, BYUH)  
Milincci, Radovan, KCC  
Delwin Dang (guest speaker, St  
Francis)

Bill Schoonover (Le Jardin)  
Jim Redmond (Webmaster,  
retired)  
Liz King (secretary)  
Jeanine Nakakura

Delwin Dang, Guest Speaker

Background: Aerospace Engineer for Rockwell/Boing, then moved back to Oahu to raise kids near family. Eventually ended up teaching at St Francis as an air rifle coach! Go figure! then was hired to start the middle school robotics program, and now teaches engineering in the high school. Some of the classes he teaches are multi-grade level and the math levels of the students are too disparate to accommodate. Thus, the introductory level engineering class is taught without math. This pathway strengthens student's design skills, gives them an intuitive sense of center of balance, stress, etc.

Topic: How to do STEM on a budget?

Mr. Dang presented us with a limited amount of materials, paper, tape, etc. Goal: Make a rocket. The propulsion was provided by a compressed air gun launcher made from PVC pipe.

Advantages: can make and test multiple models very cheaply and very quickly.

On a tour of his classroom, we saw projects his students have made/are currently working on: a solar-powered trimaran that is scheduled to sail from Kalaupapa to Kakaako on Aug 9, 2018; an AI musical machine (that won the student team two firsts and a second at the state science fair); a scale model of a shed, turned to a full-scale model, that will be the center of a sustainability module that will incorporate water catchment, solar-powered aquaponic systems, and two solar-powered golf carts. And other, smaller, more modest projects.

Farewell to old officers/election of new officers

OLD: Lisa Agle, Pres; Takeshi Nakata, VP; Secretary, Liz King; Treasurer, Mike Weber;  
Representative: Lisa Agle

All nominees for positions ran unopposed. Pua Lam motioned the slate, below, be elected as the incoming board; Liz King seconded the motion. The slate was elected unanimously.

AAPT Hawaii Section Officers 2018-2019

President: Takeshi Nakata

Vice President: Liz King

Secretary: Tessie (Lumabao) Ford

Treasurer: Mike Treasurer

Representative: Lisa Agle

Please join the national AAPT. It comes with benefits, and all local members are supposed to be national members as well. It's the right thing to do. Local chapter dues are \$15, please pay up.

Treasurer's Report: The usual up n down graph. Physics Olympic and a food are the usual expenditures; a grant from Hawaii Academy of Sciences and our dues provide income. Paul Hewett used to give us \$1000/year but hasn't lately. Jim Redmond might poke him again to remind us.

2019 AAPT meeting will be at Provo, UT, at convention center.

Next AAPT Hawaii Section meeting will Sept 8<sup>th</sup> at . . . place to be determined. Maybe UH West Oahu. (plan B: Midpac or Waipahu).

Presentation of AAPT/Hewett award. Awarded to a Maui homeschool student (same one who won two years ago). Make the check out to the mom, send it along.

Local Section Membership volume: Lisa has made a Facebook social media account aimed at increasing our digital profile and, hopefully, recruit members. Please like us on Facebook!

Demonstrations sharing:

Takeshi shared a "physics light" lab to his Algebra course. He bought a big whiteboard sheet for \$18 at Home Depot and cut it into 6 pieces, one for each group. He uses a metronome app from Google, set to 120 beats/min. Roll a marble across the board and use a marker to mark where the ball is at each metronome mark, to make a motion diagram. Then they plot and make a best-fit line using an online graphing calculator called "**desmos.com**." (Also available as an app.) Can find velocity, direction, etc.

New business: APS is coming!! (Maybe). The Far West section of American Physical Society is considering holding their annual meeting here in 2020 and are thinking flying a 1-day trial balloon here next year to see if there is any local interest. The meetings include keynote speakers, demonstrations, and student presentations. Tessie is a member of this organization and has been to meetings in the past. They have reached out to us to see what would be of interest to us. Lisa says that she has really enjoyed the national AAPT meetings because they have had both teacher-friendly, classroom ready ideas (demos, etc) AND researchers sharing their work. Takeshi reported on the value of attending APS meeting from the perspective of a grad student (which he was when he went). Pua stressed the value to students who present there. Would we be interested if the registration ran about \$100? Some said yes. Noted that no matter how much the registration fee is, it would be cheaper than flying somewhere to attend.

Door prizes, furnished by Jeanine Nakaura: two went to the newcomers at today's meeting (Tessie and Bill) and one went to our outgoing President. 😊

