Society of Physics Students Zone 17 Meeting
University of Oregon
April 11 - 12 2014

The 2014 SPS Zone 17 Meeting was hosted by the University of Oregon Department of Physics. It spanned that Friday night through Saturday afternoon and included the events as will be described below. Upwards of 50 students and chapter advisors attended from the University of Oregon, Oregon State University, Central Washington University, Central Oregon Community College, and Green River Community College. The objective of this meeting was to coalesce and connect regional SPS chapters to further the diffusion and interactions of physics and physics students with each other and the professional physics community.

The event began on the evening of Friday April 11th with a pizza/salad/dessert social, followed by a public demo show, presented by UO Chapter Advisor Stanley Micklavzina. The purpose of this Friday event was to introduce respective members of chapters who arrived early and allow for socialization. On Saturday April 12th, the day began with breakfast and explanation of the day events/agenda. After breakfast, UO Professor Raghuvneer Parthasarathy gave a presentation on his Biophysics Research titled, “The Physics of Life”. Following this talk, was another given by UO Professor Stan Micklavzina and Brandy Todd concerning physics outreach, “Physics Outreach: Styles and Inspiration”. The final morning talk before adjourning for lunch, was the keynote speaker Dr. Jim Brau on the Higgs Boson and the Big Bang, titled “A Window on the Big Bang”. Lunch provided an opportunity for further socialization between school chapters, in addition to the introduction of students who arrived on Saturday. After lunch ended, attendees returned to discuss individual SPS chapter events/ideas/processes that they have found to be productive for their school’s communities. After this group discussion, the afternoon lecture series commenced, consisting of a career talk given by UO Professor Stephanie Majewski on “Careers in Physics, Including Mine!” in addition to UO Nima Dinayi’s talk concerning UO’s Master Industrial Internship Program. Following these talks, was a tour of UO’s Lokey Labs, consisting of CAMCOR - a comprehensive materials characterization center. After this lab tour, individual chapters adjourned. The meeting officially ended at 4:45pm.

Overall, the meeting was a success. Comment from past Zone 17 councilors Ajay Narayanan and Sharon Rosell, it was the best attended meeting they can recall. There was a high level of attendance, attention and the events were well organized and very well received. On behalf of the UO, special thanks are given to Vernier Software and Technology for their donation to this event and offering to host the 2015 Zone 17 meeting where the focus will be on Physics Education. Thanks also goes to the local UofO SPS active students and officers who helped with the set-up and social activities.

Teiler Kwan UO SPS Chapter President
Annika Gustafsson UO SPS Chapter President
Stanley Micklavzina UO SPS Chapter Advisor
The meeting will take place in Willamette Hall
University of Oregon, Eugene Oregon
Host: Stanley Micklavzina and the UofO SPS
stanm@uoregon.edu, 541-346-4801

Friday April 11:
6:30 - 8:00 Pizza Social Time: Physics Reading Room Willamette Hall.
8:00 - 9:00 Public Physics Demo Show Room 100 Willamette Hall

Saturday April 12: Willamette Hall Atrium.
8:30 - 9:00 Registration, Breakfast (Provided) and Poster set-up.

Presentations will take place in Room 110 Willamette Hall
9:00 - 9:15 Welcome and Intro to the University of Oregon
9:45 - 10:15 Outreach: Styles and Inspiration. Stanley Micklavzina and Brandy Todd, University of Oregon
10:15 - 10:30: Break
10:30 - 11:10: Contributed Undergraduate Research topics:
11:10 - 12:00 "A Window on the Big Bang" Professor Jim Brau
University of Oregon.
12:00 - 1:00: Lunch (Provided) Willamette Hall Atrium

1:00 - 2:00: Posters (Willamette Hall Atrium)
2:00 - 2:30 Careers in Physics, including mine! Professor Stephanie Majewski
2:30 - 3:00 "University of Oregon’s Master Industrial Internship Program" Nima Dinyari:
3:15 Lab Tours:
   1. University of Oregon’s High Tech Extension
   2. Other Labs ... TBA
5:00 Adjourn and find somewhere to go and be social!

The Physics of Life. Abstract: Physical laws and principles guide the form and function of life. We'll explore how a physical perspective helps us understand and appreciate biological phenomena as diverse as the packaging of DNA and the biomechanics of bone shape and also, conversely, how biological systems reveal "new physics."

The Higgs Boson - A Window on the Big Bang Abstract: Oregon scientists are members of the ATLAS Collaboration, one of the two international teams of physicists working on experiments at the Large Hadron Collider in CERN, Switzerland (the other collaboration is the CMS Collaboration). There two collaborations have discovered the elusive Higgs boson. What is the Higgs boson? What role does it play in the universe today and during the Big Bang? What other mysteries of the universe are discovery targets of these collider experiments? What is Dark Matter? What is Dark Energy. These and other topics at the forefront of physics will be discussed.
Zone 17 Group Photo.

Zone 17 Meeting Public Demo Show
Zone 17 Reception Area and Break!

Prof Stephanie Majewski and the lecture room.