

The Society of Physics Students
California State University, San Bernardino

11 April 2008 Zone 18 Meeting Report

Revised 5 May 2009

Planning Committee:

Kevin Johnson
Maureen Murphy
Laura Woodney
Megan Shadrick
Rebecca Jenkins

The 2009 Society of Physics Students Zone 18 Meeting was held at the California State University, San Bernardino on Saturday, April 11th, 2009. The event was hosted and coordinated by CSU San Bernardino's chapter of SPS.

The event was organized into a social mixer Friday, April 10th, 2009 from 1800 to 2100 hours and the primary event held the following day from 0800 to 1630 hours.

Signs guiding vehicles to the event were posted Friday evening prior to the social mixer and removed after the primary event. The social mixer was held in the CSU San Bernardino department of Physics study room, with reserve capabilities to move to a larger area; roughly a dozen individuals from CSUSB and CSU Sacramento were in attendance for the social mixer. Pizza and soda's were provided for consumption during the mixer and the environment was enjoyable. The mixer's activities included:

- introductions and greetings
- demonstration of the CSUSB SPS relatively relative clock
- preliminary round of physics jeopardy

Setup for the primary event began at 0730 Saturday, April 11th. Registration began at 0800, with the majority of individuals arriving between 0830 and 0845. A fee free parking lot was provided for those attending and there was no meeting registration fee. Snacks, drinks, and lunch were available through-out the day at no additional cost to those attending. Guests were encouraged to visit the exhibits on diversity in physics conveniently setup next to the refreshments during the meeting. Opening announcements were given at 0910 and the days schedule progressed almost seamlessly from there.

Opening statements were given by Kevin Johnson of CSUSB SPS. He welcomed all those in attendance, ran through the day's schedule of events, and noted SPS continued focus of diversity awareness in physics.

Our first student presentation was Rebecca Jenkins of CSUSB on "Plasma Assisted Molecular Beam Epitaxy of β - Ga_2O_3 " and began at 0915.

0930 began a short pre-film discussion and followed with the viewing of the first 67 minutes of "NOVA Percy Julian: Forgotten Genius." There was a refreshment break from 1040 to 1055 followed by a discussion on Diversity and the Faces of Physics as applied to the film as well as to include diversity in the forms of race, sex, financial status, age, and persons with disabilities.

1100 to 1115 Jane Curnett of CSUSB presented on the "Patterned Growth of Extremeophiles."

1115 to 1135 Paulo Lopes of CSUS presented on "Searching for Brown Dwarf Stars."

1135 to 1145 Blake Shultze of CSUSB spoke about a form of Bio-Electric fuel being developed at Zzyzx.

Lunch was served from 1145 to 1320 and included pizza and refreshments. The Faces of Physics jeopardy was played during lunch from 1215-1320, with a doubles team from CSUS winning with a score of 7000 points, and we only played the first round, congratulations Brandon Ausmus and German Valencia of CSUS. After lunch and laughs we continued the presentations further into the afternoon.

1320 to 1340 Brian Strader of CSUSB presented on "Simulating Spatial Partial Differential Equations through Cellular Automata."

1340 to 1400 Megan Shadrack of CSUSB presented on "High Power Fiber Laser Use for Petrophysics Applications."

1400 to 1440 Dr. William Degraffenreid of CSUS presented on

"Scientific Professionalism."

1440 to 1520 Robert Barchfeld of CSUS presented on "Photometric Redshifts with Artificial Neural Networks."

1520 to 1540 was our last refreshment break for the day. The event's keynote speaker, Dr. Stephan Haas of the University of Southern California, arrived and mingled with many attendees prior to his presentation.

The event officially concluded profoundly with Dr. Haas' thought evoking talk on physics and philosophy followed by an engaging presentation on Quantum Information Theory. The meeting officially ended at 1630, however many individuals stuck around and conversed with Dr. Haas and other peers until 1700.

The meeting was organized in the form of a symposium with many interesting talks and presentations on a wide range of topics in physics throughout the day. The total count of those attending was 20, though preparations were made to accommodate many more. Though the event was relatively small, the event did not suffer in any way from it. The entire group was very sociable and it was a fun and entertaining day. Plans have already been made by many in attendance to meet at the next year's event, wherever it may be.

SPS Student and Faculty representation from:

- CSU San Bernardino
- CSU Sacramento
- U. of Southern California

The total cost for the event was:
 \$738.24 broken down into:
 Name Badges - \$33.93
 Room/Parking - \$128.00
 Signage - \$50.00
 Liquid Refreshments - \$365.15
 Solid Refreshments - \$87.04
 Pizza (mixer) - \$28.34
 Pizza (meeting) - \$45.78

The SPS at CSUSB is honored to have had the opportunity to host the 2009 Zone 18 Meeting and would like to especially thank the Zone 18 Councilor Dr. William DeGraffenreid of CSUS and the Associate Zone 18 Councilor Chris Thomas of the University of Nevada, Reno. Additional appreciation is extended to Kendra Rand and Lydia Quijada of the SPS National Office. This event could not have happened without the support and knowledge of these individuals.



(above) Dr. Stephan Haas



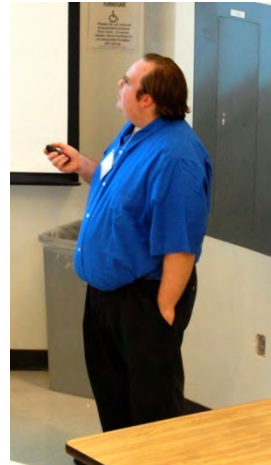
(above) Robert Barchfeld



(above) Blake Shultze



(above) Dr. William Degraffenreid



(Left) Brian Strader



(above) Most of the attendees (below) the RHR