

SPS Zones 9 and 11 Joint Meeting

Hosted by the University of Wisconsin –River Falls, in conjunction with the joint meeting of the Wisconsin and Minnesota Sections of the AAPT

by Earl Blodgett, UWRF SPS Advisor

Students from seven schools in Wisconsin, Minnesota and Iowa gathered at UW-River Falls in northwestern Wisconsin on October 29-30, 2010, for a joint meeting with regional physics teachers. Combining the meetings added a lot to the excitement and opportunities! There were so many talks that two parallel sessions were held on Friday afternoon and Saturday morning, with one session on Saturday morning devoted totally to student talks. There was also a poster session, with presentations by students and teachers intermingled.

At least 34 students officially registered for the meeting, with several additional UWRF students participating in some portion of the meeting. Four schools from Zone 11 sent students: Coe College (Iowa), Bethel University, St. Mary's University and Winona State University. Three Wisconsin schools represented Zone 9: UW Eau Claire, UW Platteville and UW River Falls. The UW Eau Claire chapter provided assistance in planning and promoting the SPS meeting.

The AAPT Section meetings began at 1 pm on Friday, much earlier than a typical SPS Zone meeting. However, many students were on hand to take in talks or participate in workshops, with more students arriving Friday evening and even more for Saturday morning. One of the novel benefits of sharing a meeting with the physics teachers was the availability of seven workshops, which many SPS attendees took advantage of. Sometimes partnering an SPS Zone meeting with another meeting leads to the SPS being swamped; however in this case, SPS members made up about a third of the total attendance! The teachers were very pleased to have the student presence, and the mix of students and teachers in talks, posters and workshops gave the meeting a very dynamic feel.



Two tables of students enjoying the Friday evening banquet

Friday evening about 90 people gathered for a banquet in the University Center, giving a chance for students from several universities to get acquainted. The guest speaker after dinner was Dr. Albrecht Karle from UW Madison, giving us an overview of the IceCube neutrino astronomy project at the South Pole. After his presentation, students and teachers were invited to tour the “Haunted Lab” set up by UWRF SPS and Chem Club members in preparation for Halloween tours on Saturday evening.



Kyle Jero presenting to a room filled with students and faculty in the Saturday morning student session

There were six talks presented in the student session on Saturday morning. That session was moderated by Alec Herr (Coe College), the Associate Zone Councilor for Zone 11. At least 40 people attended that session, a good mix of students and faculty.

There was a parallel session of faculty talks, and a workshop on Nuclear Science that drew some SPS members.

Student talks:

- “High-speed video as a tool for undergraduate fluid mechanics research” Brian Clark, Bethel University
- “Frequency-locking a diode laser to a lithium atomic beam” Jack Houlton, Dan Klemme, Lauren Otto, Brandon Peplinski and Chad Hoyt, Bethel University
- “Is More Better? Determining if additional information improves IceCube’s detections” Kyle Jero, UW River Falls
- “Modeling bar-resonator interaction in mallet instruments” Lindsey Neby, UW River Falls
- “Investigating the Atmospheric Effects on Cosmic Ray Showers using CORSIKA” Amanda Steck, UW River Falls
- “Design and development of physics simulations in the field of oscillations and waves suitable for k-12 and undergraduate instruction using video game technology” Trevor Tomesh, UW River Falls

The mid-morning break on Saturday took us all to a poster session, mixing student posters with faculty posters. It was a lively break!

There were three student posters.

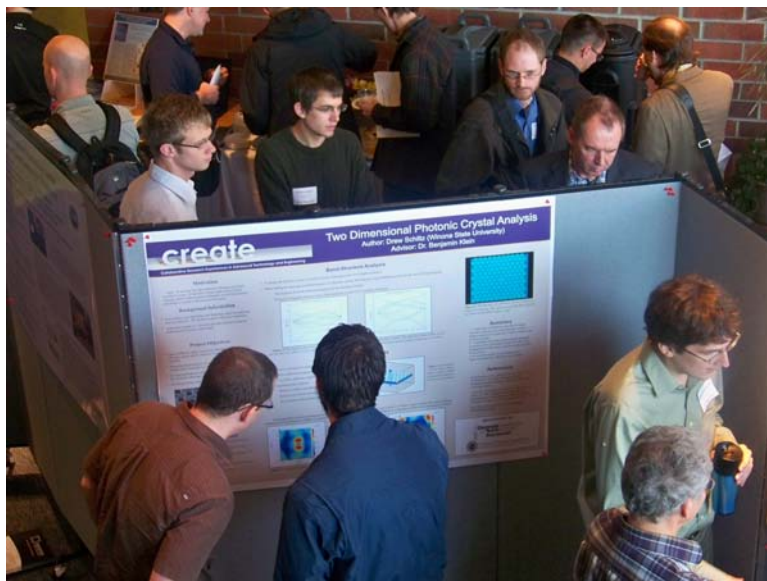
- “IceTop Latitude Survey” Drew Anderson, UW River Falls

- “Progress toward a lithium magneto-optical trap” Chad Hoyt, Lauren Otto, Dan Klemme, Jack Houlton and Brandon Peplinski, Bethel University
- “Two dimensional photonic crystal analysis” Drew Schiltz, Winona State University

After the conclusion of talks, the Wisconsin section sponsored a door prize drawing, and many SPS attendees went away with goodies. We concluded the meeting with lunch and a short business meeting, discussing how to spread the word about the advantages of SPS membership, as well as sharing news from the Fall SPS Council meeting.



Brian Clark (Bethel) presenting his talk on high speed video in fluid mechanics, with AZC Alec Herr as session moderator



Student poster



Another view of the poster session



Bonus photo – just cuz the pingpong cannon is always cool!