

2011-12 Society of Physics Students

ANNUAL CHAPTER REPORT

Chapter Information

SPS ZONE	18
(for help see the Zone Map Here: http://www.spsnational.org/governance/handbook/websites.htm)	
SPS Chapter Number	0823
School Name	California State University, Long Beach
Chapter Advisor	Thomas Gredig
Email	tgredig@csulb.edu

Part 1: Our chapter's interactions with our campus community

- We held twelve meetings this year, six in the Fall semester, and six in the Spring semester. At our meetings, we talk about different resources for applying to internships, REU's, fellowships, and jobs. We also talk a lot about how to implement outreach programs to not only our school, but also local high schools. We also spent some time planning out different events and trips we would like to have, including tours of labs on, and off, campus. In a special meeting event, we even had a competition to build sturdy foil boats.
- We had three meetings this semester where guest speakers came to visit us; we had Nick Squires, alumni of our school as well as an established name at the Boeing Company and owner/creator of his own software company. We also had our very own Zone Councilor Doug Singleton visit our meeting to interact with students, tell us about different ways to get funding for conferences and events, and tell us about some upcoming projects we would be interested in. The last visitor we had was Richard Scalettar. Richard is a large part of the PhD program at UC Davis, as well as the son of a past Physics Department Chairperson. Upon his visit he talked with our members about PhD programs and some changes in the department since his last visit.
- In a partnership with our campus Environmental Science and Policy Club, our chapter hosted a screening of the independent film *The City Dark*, a movie about the damaging effects of light pollution on our view of the stars.
- Our department puts on an open house each semester for high school teachers in the area to bring prospective Physics majors to come tour our department. Our members attended these open house events and had the chance to socialize with the incoming students. We were also part of a student panel for the incoming students to ask all the questions they felt teachers and advisors could not answer. Having our SPS members there make the incoming students feel more comfortable about entering what seems to be a scary environment. In addition to the open house events, our department holds a mixer each semester to inform students already enrolled in our school about our physics program. Undergraduate students get the opportunity to communicate with Masters students and professors, all while competing in a friendly competition. To help increase knowledge in the department, we also visited an entry-level class for students interested in becoming a science major. Our visit provided information about the department, SPS, our meeting dates, and how to become more involved with our chapter. To promote our chapter, we also sold SPS t-shirts to make our club more public while raising money for events.
- To get more students involved in research and internship participation, two of our

members were asked to give a presentation at our department's weekly colloquium. After their presentation to the group, the students talked more about how they became involved in the project to the SPS members.



CSULB SPS with guest speaker Richard Scalettar.



Some students enjoying pizza at our last meeting.



President Julia Meinen and Vice President Stephanie Sodergren building a foil boat in a competition for some cookies!



Master's student Rick Patrick and undergraduate student Carlos Garcia team together to build their foil boat.

Part 2: Our Chapter's interactions with the professional physics community outside the college/university

- This year our chapter attended the Zone 18 meeting at California State University Fresno. To attend the meeting, we drove 260 miles and stayed with SPS members of Fresno State. While visiting, we also had a tour of the campus, as well as a social dinner with the attendees of the meeting. We had six members that attended the meeting: Julia Meinen, Jill Pestana, Bryn Horst, Boe Colabewala, Brandon Kawata, and Carlos Garcia.
- Our members Jill Pestana and Stephanie Sodergren worked with SOFIA as interns with NASA; they presented their work multiple times at different events.
- Our member Thomas Baker won a school wide student research symposium with a presentation of his research of "Superconducting Magnetic Proximity Systems and Mathematical Analogies to Classical Mechanics."
- In order to get our chapter members more active and excited about SPS, we planned a few events with the SPS chapter at Cal Poly Pomona. With their chapter, some of our members went to spend a day at the California Science Center in Los Angeles, California. We had so much fun that we planned a second trip to Griffith's Observatory. Both events were a chance to network with other physicists while having fun!



Bryn Horst, Boe Colabewala, Jill Pestana, Carlos Garcia, and Brandon Kawata working on an egg catching tower at the Zone 18 Meeting.



CSULB's Bryn Horst with SPS members from Cal Poly Pomona, Sacramento State, and Fresno State SPS watching the egg tower activity at the Zone 18 Meeting.



CSULB SPS members with Doug Osheroff, Nobel Laureate, at the Zone 18 Meeting.



CSULB SPS President Julia Meinen and member Fiona Ruiz at the Griffith's Observatory trip.



CSULB SPS members along with Cal Poly Pomona SPS members having fun at the California Science Center.



Cal Poly Pomona's
Courtney Lemon with
CSULB's Julia Meinen and
Jill Pestana on a camera
at the California Science
Center.



Stephanie Sodergren and Jill Pestana filming a video for NASA's SOFIA project.

Part 3: Our chapter's interactions with SPS National and participation in SPS National Programs.

• Our president, Julia Meinen, was nominated for the Associate Zone Councilor position for the 2012-2013 year.



Julia Meinen introducing herself to Zone 18 along with the other AZC nominee, Thanh Nguyen, and the Zone Councilor nominees Doug Singleton and Homeyra Sadaghiani.

Part 4: Our chapter's interaction with the off-campus public community

- To promote Women in Physics, a few of our members helped put on an optics workshop for young Girl Scouts in Sand Diego. The workshop's main goal was to encourage young girls to feel comfortable with science, in the hopes that one day they will pursue a future in science. At the workshop, our members taught the girls how to make a homemade telescope, all about lasers, and what a wavelength of light measures.
- Our club also worked with a local high school to set up an event where high school
 and college students could watch the solar eclipse safely and enjoyably. At the event
 we had games and activities for the students while they waited for the main event.
 We also provided solar screens and other ways for students to view the eclipse.
- Our chapter also put together a plan to give a presentations and demonstrations to Physics classes at the local high schools. The goal of the program is to get students more informed about the Physics department at CSULB, as well as what it means to be a physics major. The plan will be implemented in the Fall of 2012.



Stephanie Sodergren, Stacie Woo, Julia Meinen, and Jill Pestana having fun with the other helpers at an Optics Workshop.



Julia Meinen and David Lattimer enjoying the solar eclipse!

Part 5: Our chapter's other efforts to further the SPS Purpose and Mission (This category will be double weighted)

SPS MISSION: "The SPS exists to help students transform themselves into contributing members of the professional community. Course work develops only one range of skills. Other skills needed to flourish professionally include effective communication and personal interactions, leadership experience, establishing a personal network of contacts, presenting scholarly work in professional meetings and journals, and outreach services to the campus and local communities."

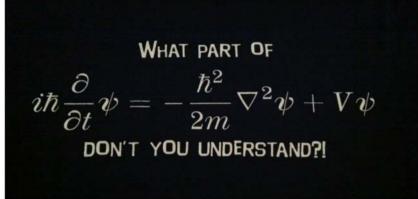
- Our chapter really focuses on resources, outreach, and networking. We provide plenty of tools for the students on our campus to get themselves out into the professional community of physicists. We also find it essential to have networking skills, not just with people in our classes, but also people from other campuses. We aim to network with physicists from neighboring schools as well as high school students and teachers. Our chapter is very unique in the sense that we start recruiting members straight from the high schools. We use our networking and outreach events as an opportunity to branch out and use the leadership skills we try to get others to develop. This goal is exactly what the SPS mission statement is all about.
- Because our SPS members sometimes face the difficulty of being students of physics, we have set up a special room in our department that is for SPS members only. The room has white boards, desks, computers, books, pens, and anything else we would need to study. This room gives our students the advantage of helping each other. When students use the room, it is easy to find someone to help when they are stuck on certain physics questions. Not only can you at times find someone else in the room, the room is conveniently located across for all the professors' offices in case there are no students around to help.
- Meetings are a great way for chapters to communicate. Because CSULB is a commuter school, meetings are not always our best option. To solve this problem, we have turned to the internet for more accessibility. BeachBoard is a school website that teachers use to post work for students, and it can be accessed by anyone with a school ID enrolled in each course. This website is often used by all students so we use a continuous course page to include everyone in updates, emails, and access to our meeting minutes and agendas. Another school website we use for accessibility is OrgSync. The website is a database for communication with clubs. We use it to make our emails and events public for students who are not already members of the physics community but to get involved. We also recently updated our official webpage at http://www.csulb.edu/org/college/sps/. The webpage now includes detailed information about our officer positions as well as each of our officers. It also has links to the different webpages we discuss as resources in our meetings. To ensure that our,

and the department's, important dates are easy for our members to find, we included a calendar that easily syncs with personal calendars and smart phones that is updated weekly. The best part about our newly redesigned webpage is the direct link to our brand new Facebook page. Our chapter can be found on Facebook at https://www.facebook.com/CSULongBeachSPS. Facebook is a great way for our members to communicate. Not only can they be instantly notified of events, or get direct access to all event photos without hassle, they can also network with each other more easily.

- As mentioned before, our campus is mainly a commuter school. When planning events, our chapter makes sure to find transportation for everyone to attend events.
 We use our fundraising money to make sure that location is not a problem that prevents our members from attending certain weekend, or out of town events.
- With our membership numbers increasing this year, our students have become much more active. Holding different inter-chapter events has inspired many of our members to take a more active role. Student leadership is becoming much more apparent in our members as our numbers grow. Our members are getting more excited to be involved which drives them to step up more. Our newly redesigned website, t-shirts, and outreach opportunities are all the results of a growing foundation of leadership amongst our members.
- This year our SPS chapter started out as a club lacking funds, participation and direction. Now, our chapter has raised over \$600 to provide funding for travel to different conferences or events. We have also gained more support from our college just by getting involved with more outreach events. By planning fun trips with other local SPS chapters, we have managed to increase our numbers to a steady amount of about 20 active members. With our organizational issues clearing up, things have been able to run much more smoothly, turning our professional society into something we can also now enjoy. We plan to keep fundraising so we can host events on our campus, and create a more stable outreach program for the local high schools.
- Our chapter has grown in membership numbers and activity, but we still have a long way to go. We plan to set up more tours with on campus facilities, as well as neighboring science centers such as JPL and SpaceX. We have highly talented members and we would like to focus more on their research as well, instead of just focusing on resources students can use to further their research.



The front (top) and back (bottom) of our first SPS t-shirt.



Group shot after our first meeting of the 2011-2012 school year.



Sigma Pi Sigma Activity Report (for those chapters / schools which also have a Sigma Pi Sigma Chapter)

 Our campus Sigma Pi Sigma chapter is currently inactive. We hope to bring activity back in the Fall of 2012.

Please Return Completed Report by June 15, 2012

Submit report on the SPS CHAPTER REPORTS WIKI PAGE:

http://spschapterreports.pbworks.com/w/page/38237362/SPS-Chapter-Reports-Wiki



Your report will be stored in on the SPS Chapter Report Wiki.

If there are any questions, please contact the SPS National Office Staff Tel: (301) 209-3007; Fax: (301) 209-0839; E-mail: sps@aip.org