



SOCIETY OF PHYSICS STUDENTS

Associate Zone Councilor Candidates

2017-18 National Council

Ballots Due: April 20, 2017

For more details, visit:

<https://www.spsnational.org/about/governance/national-council/nominations-elections>

Zone: 1**Name:** Samuel Borer**Chapter:** University of Maine

Biography: Sam was raised in a military family, spending his early childhood in England and his late childhood in Minnesota. He was a professional dancer throughout high school, traveling around the country while performing, choreographing, and teaching. His original intent to continue his professional dance career ended two weeks after graduation when a drunk driver ran a red light and t-boned his vehicle. He then moved to Maine. At the University of Maine, Sam is pursuing a double major in Physics and Mathematics. After his first semester of college, Sam enlisted in the Maine Air National Guard as a Chemical, Biological, Radiological, and Nuclear Warfare Specialist. He has deployed around the world, including a nine-month deployment to Kuwait and Afghanistan for Operation Enduring Freedom and Operation Inherent Resolve. At the University of Maine, Sam serves as Chapter President of SPS, as well as the student body representative to the UMaine Board of Trustees. He is also the student body member of the Provost's Council, the Sexual Assault and Relationship Violence Prevention Committee, and the Student Code of Conduct Committee. Sam is involved with Student Government, Honors College Student Advisory Board, Photography Club, University Flying Club, Dance Department, and the Health Professions Club. At present, Sam is an undergraduate researcher in the Neutrino Division of Fermi National Accelerator Laboratory.

Candidate Statement: Sam would like to focus strongly on bringing SPS Zone 1 together as a community, and beginning to build relationships between the chapters of the zone. Additionally, as many national resources available from SPS are often overlooked by local chapters, Sam hopes to work with all SPS Executive Boards within the zone to ensure that their undergraduate members have access to the extensive professional resources and career guidance that SPS has to offer.

Zone: 2**Name:** Salvatore Ferrone**Chapter:** Ithaca College

Biography: I have served as the Vice President of our SPS Chapter and Head Tutor of Physics at Ithaca College. As vice president of our chapter I regularly lead small activities with physics majors to build a strong community. As Head Tutor of Physics I run nightly office hours for all entry level physics courses, regularly communicating ideas to non-science individuals. Along with my student leadership positions I have conducted four semesters of undergraduate research; including work in optics, education, and 3D printing. I am on track to complete minors in Mathematics and Chemistry. After graduation I plan to attend graduate school in physics.

Candidate Statement: My goal is to have more SPS chapters send students to physics conferences. I plan to reach out to SPS chapters in our zone and show them how much of an impact their leadership can have on the physics majors in their department. My chapter had successfully sent 12 students to California for PhysCon 2016 and it's amazing how much the entire physics student body had benefitted from this conference. I'd like to work with chapters to identify resources at their disposal to help support conference participation. For example, applying for SPS travel awards, NYS Section of APS symposium travel awards, and on campus resources such as student government associations.

Zone: 2

Name: Mia Marie Manzer

Chapter: Ithaca College

Biography: I am a current freshman, with a sophomore standing due to a large amount of transfer credits, at Ithaca College working towards a Bachelor of Science in Physics. I attended PhysCon 2016 in November as a reporter for my SPS chapter. I am an active member of my SPS chapter here at Ithaca College. I do research with Professor Michael "Bodhi" Rogers on 3D Design & Printing.

Candidate Statement: I would like to bring more diversity into Physics as well as help include chapters in more activity with SPS. I think that bringing SPS Chapters together outside of conferences and meeting each other in a more informal environment could help with more involvement and professional connections for students.

Zone: 3

Name: Hannah Buckner

Chapter: Seton Hall University

Biography: Hannah Buckner started her undergraduate studies as a freshman in physics at Seton Hall University in 2016. She has also been a dedicated Honors student in Seton Hall's Honors Program. During her first year at the university, she has been an active member of her SPS chapter and was a replacement associate zone councilor for Zone 3 during the 2016-2017 academic year as well. While serving as AZC she was also on the Awards Committee for SPS. Through SPS, she strived to gain a better understanding of involvement and life in the physics world and spread a love for math and science to others. In addition to these involvements, Hannah also tutored calculus and varying levels of French to student athletes. In her spare time, Hannah plays flute and piccolo, reads scientific journals, and keeps up to date on events in physics and astronomy.

Candidate Statement: If elected, I pledge to create better connectivity and involvement in events throughout the zone. I aim to achieve this by having a weekly newsletter of sorts that will share information between chapters and keep everyone in the information loop of events and important dates

as well as through individual contact with each chapter through email, phone call, and Skype (or similar technology) chats. In addition, I strive to be a strong voice for the chapters in my zone and work diligently with the SPS National Office to attend to the needs of the chapters. Finally, I hope to bring more students to SPS chapters and spread the passion and love of physics to incoming freshman and those considering changing their majors to physics and I would aim to inspire chapters to be active in pursuing this goal and maintaining attendance.

Zone: 4

Name: Emad Davis

Chapter: Randolph College

Biography: From an early age Emad's family fostered a fascination with the natural world and technology, as well as a thrust to understand how and why universe and systems within operate. A Montessori education followed by a tightly knit private high school nurtured his love for learning, giving Emad a broad knowledgeable to enter the world as a young adult. Emad participated as a Cultural Ambassador and then as a Group Leader in two different US Department of state funded programs spanning over five nations, and these provided him the opportunity to develop and refine effective organization and communication skills. These experiences strengthened his sense of responsibility for the betterment of humanity, and consequently taught him a service-based approach to leadership. Whilst perusing a degree in Engineering Physics from Randolph College, Emad also manages a computer repair shop for a regional IT firm, sits on the Student Judiciary Committee, and of course stays involved with Randolph's SPS chapter.

Candidate Statement: I would like to continue to work to help chapters become active and to help Zone 4 become more vibrant. I will work to help the chapters connect with each other. I will make sure that we are appropriately represented on the National Council. Moreover, it is my goal to keep the chapters in Zone 4 will informed, and to bolster inter-chapter sharing in any number of ways including the zone meeting.

Zone: 4

Name: Samantha Lumpkin

Chapter: The George Washington University

Biography: The summer after ninth grade, Samantha Lumpkin attended a summer program where she learned all about astronomy and astrophysics. This set her on the path to studying physics at The George Washington University. Now a junior, Ms. Lumpkin has found a passion for many fields in physics, but has a special interest in nuclear physics. She has served as the Vice President of her local SPS chapter since last February, and is also a Physics Learning Assistant and tutor for her university. She hopes one day to serve in the government promoting physics and the physical sciences, working in policy or national

security. Ms. Lumpkin is looking forward to the opportunity to serve as the Zone 4 Associate Zone Counselor, sharing her passion for physics with the wider community.

Candidate Statement: If elected, Samantha Lumpkin plans to make strengthening the community one of her main goals. While community within local chapters may be successful, encouraging more communication between chapters will benefit everyone. Creating a strong network will allow members to get the most out of their SPS experience, by fostering relationships and collaboration between chapters. Chapters can share resources more effectively and better SPS programming for all members. Ms. Lumpkin will accomplish this by encouraging chapters to participate in larger events, such as zone meetings, and by encouraging chapters to host joint events. She will also encourage chapters to share events and opportunities in the Zone with other chapters to get more people involved. Ms. Lumpkin feels qualified to hold this position due to her experience as Vice President of SPS. This position has required her to run events and oversee the development of a New Member Project, in which freshmen and sophomore physics majors carried out independent research. Ms. Lumpkin's past experience will help with her efforts to better SPS for the entire Zone 4 community.

Zone: 4

Name: Sarah Monk

Chapter: University of Maryland-College Park

Biography: Sarah is currently a third year physics major and at The University of Maryland, College Park where she is an NSF S-STEM Scholar and recipient of an SPS Leadership Award. Sarah completed an Associates Degree in Physics at Green River Community College before transferring to UMD in 2014. She has been active with the Society of Physics Students since 2012, serving for 2 years as an officer of the Green River Community College Chapter before transferring to UMD. Sarah is currently President of her SPS Chapter, an officer of the Women in Physics at UMD, and a member of The American Nuclear Society. Sarah's passion for building community and inclusivity in physics is shown by her service on the organizing committee of the 2016 and 2017 Conferences for Undergraduate Underrepresented Minorities in Physics, and her involvement in the Access Network, a network of graduate and undergraduate students across the country working towards a vision of a more diverse, equitable, inclusive, and accessible STEM community. Sarah has also been conducting undergraduate research with the LZ Dark Matter Detector Collaboration since Fall 2015 under the guidance of Dr. Carter Hall, where she studies and tests the purification process of liquid Xenon for use in the LZ time-projection chamber. Since Fall 2015 Sarah has been training as a Nuclear Reactor Operator through the Maryland University Training Reactor. Sarah plans to pursue a PhD in Nuclear Physics after graduating from UMD.

Candidate Statement: It is no exaggeration when I say that The Society of Physics Students has changed my life. The community and support I've found in SPS is what has led me to this point in my life and I would like to ensure that all students have the chance and opportunity to receive the most out of their physics experience. As Associate Zone Counselor I intend to build relations among all chapters in Zone 4 through stronger communication, multi-institution events, and personal involvement. Networking and

communications are such a crucial part of success in the professional physics community, and we have amazing opportunities here in our region to grow and support each other. I've served as president of two different SPS Chapters now and I've seen many different ways to build a successful chapter. I want to make myself available to help each chapter in any way necessary, whether it is through helping initiate new outreach programs, helping students find research and internship opportunities, or building enthusiasm within the chapter. I also want to actively work within our region and organization to promote diversity and inclusivity in physics to ensure that every student has an equal opportunity for knowledge and advancement. It would be an honor to serve Zone 4 as Associate Zone Councilor, and help take our organization towards a brighter and stronger future.

Zone: 5

Name: Erin Brady

Chapter: High Point University

Biography: I am a sophomore at High Point University studying Graphic Design and Physics with a minor in Mathematics. I have been actively involved in the Society of Physics Students for one year. Besides attending monthly meetings and club social events like picnics and laser tag, I have volunteered at our two primary public outreach programs: HPU Universe Day and the Piedmont Triad Science Fair for Non-public Schools. At these outreach events, I assisted children with hands-on activities including hovercraft rides and a conservation of angular momentum apparatus. On campus, I have worked at the Survey Research Center, where I called local residents and asked about their opinions on various matters. In my hometown on Long Island, NY, I worked at a gymnastics gym where I instructed students between the ages of 4 and 12 in a group setting that focused on learning skills necessary for the different elements of gymnastics. I have been nominated for University Ambassador, one of the most prestigious jobs on campus. If selected, I will give campus tours and welcome campus guests. At the recommendation of faculty, I also applied for a Fulbright Summer Institute. In the Spring Semester of my first year at HPU, I decided to double major in physics. Combining graphic design and physics gives me an interesting perspective on the role of creativity in scientific discovery. Our department emphasizes computational modeling and research in the first year. As a result, I have experience programming in VPython and using elementary numerical integration techniques to solve problems. I am in the middle of a year-long, one-credit course on Research and Scientific Writing in Physics. Last semester, I collaborated with a lab partner to write a research proposal. This semester, we are measuring properties of soft mat materials and using a computational model (Hookean Springs in series) to model their behavior. We are comparing layers of yoga mats to expensive gymnastics mats to see if yoga mats are a good low-cost alternative. The project requires physical modeling, computational modeling, and good experimental techniques

Candidate Statement: If elected, as Associate Zone Councilor I will urge and enable other chapters within my zone to be active in public outreach programs and community-building activities in their chapter. Here at High Point University, we have an annual event called HPU Universe day which nearly 1,000

members of the community attend. I would encourage other chapters to have similar events by offering insights on activities and organization logistics. Last year, our chapter of SPS received the award for SGA Club of the Year at HPU. Two years in a row, we also received an award for Outstanding Chapter from the National SPS. I would like to help others implement some of the successful ideas that helped our chapter at HPU. For instance, we discovered that we can submit bills to the SGA (Student Government Association) for funding outreach events and for students' travel for conferences. This helped us send 19 students to 2016 PhysCon. Other chapters may also be able to use the students' governing body on their campus to obtain funding for SPS activities. This past November I attended the 2016 PhysCon where we discussed the importance of both outreach and chapter comradery. That meeting gave me a great opportunity to learn about what other chapters do, such as group outings and movie nights to build relationships between members. We also discussed concerns that most chapters have, such as diversity and equality. I hope chapters in our zone can discuss these same topics and share ideas, including success stories, at our Zone meetings. Public outreach, strong community, and increasing diversity and equality will be my mantra. As Associate Zone Councilor I will work to improve the SPS chapters in my zone in these areas.

Zone: 5

Name: Aisling Power

Chapter: UNC Asheville

Biography: I am currently a junior at UNC Asheville, majoring in Physics and Math with a minor in Astronomy. I came to UNCA as a sophomore transfer student in the fall of 2015 and got involved with SPS activities immediately. Last semester, I joined a research project with my fellow student Olivia Byrd and research advisor Dr. James Perkins. Our task is to measure variations of the speed of sound within a corrugated tube using experimental methods. We will continue to develop a theory and model describing the behavior of sound over the course of this semester. I am also one of two STEM outreach interns for the Physics department. As an intern, I help develop events for Science Olympiad and work on various outreach events with the university and surrounding community. My plans after I graduate are to join the Peace Corps to work as a Science and Math teacher in Africa for two years and then pursue a PhD in Theoretical Physics.

Candidate Statement: SPS is a wonderful organization that serves a vital purpose in our community that I would love to play a greater role in. I am passionate about joining an organization that promotes outreach services, community building, and inclusiveness. Fostering an environment in which students can feel welcomed and valued is important to me. I understand what it is like to feel shy or awkward in social situations. I know many people have a lot to say and contribute to our society but just do not feel comfortable enough to do so. In my experience, getting over this hesitation simply requires practice and opportunity. To me, this is what SPS is for: facilitating opportunities for students to get involved with the science community and feel more comfortable then to reach out and engage the community at large in scientific discussion and discovery. I am therefore very excited to take my interest in outreach and

community development to the next level by attending meetings and learning from the perspectives and experiences of the other chapters to improve our chapter.

Zone: 5

Name: Ryan Stempert

Chapter: Davidson College

Biography: Ryan Stempert is a junior physics major and mathematics minor at Davidson College. He has been involved with the Davidson College Chapter of the Society of Physics Students since his sophomore year and has held the position of Vice President of Interdisciplinary Affairs for the past year. In this capacity, he has organized events to enhance the connection between the various STEM departments on campus, as well as actively assisted other members of the executive council of the Society of Physics students with following through on their own plans and duties. Ryan will be conducting research on volumetric radiography of historical documents under Dr. Dan Boye during the summer of 2017. Ryan plans to pursue a PhD in applied physics or mechanical engineering after graduation.

Candidate Statement: If elected as Associate Zone Counselor for Zone 5, Ryan will seek to encourage collaboration among chapters within the Zone. Like many physics students, he attended the Quadrennial Physics Congress in November of 2016. He found the experience very heartening and hopes to achieve a similar comradery in the, albeit smaller, Zone 5 Meeting in the upcoming year. Outside of this event, he hopes to help foster a stronger sense of community between the local Chapters, and create bridges of communication between all North and South Carolina Chapters. Ryan looks forward to representing Zone 5 and working with the SPS National Council on issues relevant to our Zone as well as the society as a whole.

Zone: 6

Name: Sinead Fernandes

Chapter: Florida Polytechnic University - spschapter2054

Biography: My name is Sinead Fernandes, I am a sophomore at Florida Polytechnic University. I earned my Associates in Arts degree at Polk State College in 2015. I currently serve at the Florida Polytechnic University Rotaract Secretary and I love to engage in community service activities. During my time at Polk State College, I served as the Student Government Association President, Phi Theta Kappa (International Honors Society) Secretary, and a First Flight Mentor to incoming freshmen. Also, I have presented at the 11th Annual Leadership on Broadway Experience in New York as their only student presenter. I would love the opportunity to use my experience over the years to better serve the SPS Community and improve as a leader.

Candidate Statement: 1. I have plans to meet my zone 6 institutional members in a forum once per semester. This will allow me to network with the institutions and broaden scope of outreach and educational activities. 2. I will make sure to communicate and find with zone members and their institutions about any issues with their SPS chapters and try to resolve or bring it to the SPS National Office. 3. I will encourage freshman and new students to involve more on SPS Chapter activities across zone that will not only enhance their career building, but also help our community better inform about the STEM education, research and outreach

Zone: 6

Name: Silas C Fradley

Chapter: Georgia Tech Society of Physics Students

Biography: Born and raised in Florida before moving to Georgia for high school and college. I played tennis for much of my youth, culminating in an Atlanta doubles title. In high school, I was a part of the school's academic and math teams, as well as competing under the Technology Student Association (TSA). For TSA, I co-designed an application for the Android platform to facilitate learning by using more dynamic lessons. Through my high school, I also got involved with the honor societies which focused on reaching out to local elementary and middle schools and providing STEM lessons. I carried this sentiment with me to Georgia Tech, through the SPS chapter's program Spin Spark and Freeze, which is a program designed by an alum where we demonstrate phenomena relating to electricity, rotational motion and heat, respectively. I was also a chair for the chapter's Physics Field Day where we have high school students compete through a few physics test and an experimental round while also showing them what a (physics) student's life is like at Georgia Tech.

Candidate Statement: The true value of STEM education is not necessarily the facts themselves but the methods and logic itself. No matter the path, a strong STEM education provides a strong foundation by encouraging students to question and reason with evidence. I will do my best to facilitate any STEM outreach.

Zone: 7

Name: Gabrielle Feeny

Chapter: Kettering A

Biography: As a high school student, I worked to become president of my school's radio astronomy team as well as captain of programming and wiring on our FIRST robotics team. For three years, I conducted research in the Mars Exploration Student Data Teams program and once competed with that research in the Science and Engineering Fair of Metro Detroit. At present, I am an undergraduate student in my sophomore year studying applied physics. I am vice president of my university's physics club, where I organize events and help to conduct weekly meetings. In addition, I am copy editor of the university

newspaper and vice president of programming and education in my sorority. Because of my involvement in various extracurricular activities over the years, I feel I have fostered communication, organization, and collaboration skills. In terms of professional experience, I take part in a cooperative education program through which I work as an intern in an automotive testing lab, where I've had the opportunity to further sharpen those skills.

Candidate Statement: If I were to be elected Associate Zone Councilor, I would like to keep in touch with and improve communication between other SPS chapters within my zone, making sure to keep them informed of SPS national programs. To aid in accomplishing this, I will ensure there is a zone meeting that is accessible to all chapters. Because our SPS chapter is smaller in size, I feel that I would be able to better help similar chapters recruit and retain their members.

Zone: 7

Name: Connor Murphy

Chapter: Grove City College

Biography: Connor Murphy is a Sophomore Physics and Mathematics Major at Grove City College. He is currently the Vice President of the Grove City College Physics Club and the Practice Coordinator for the Grove City College Club Ultimate team. He spent three semesters during high school doing undergraduate research on fuel cells at Flathead Valley Community College, and has been doing Nanotechnology research for the last three semesters at Grove City College. At PhysCon 2016 he was awarded an OSA Applied Physics Award for his research on aluminum-air fuel cells. He has helped at a variety of different physics outreaches seeking to spread excitement and understanding for physics, and has a deep passion for it himself.

Candidate Statement: If I am elected, my goal will be to perform all assigned tasks to the best of my ability, and to actively seek out ways that I can benefit the national council. I have only limited experience in leadership roles in Physics, but I am ready and excited to learn how to apply myself to become an effectual and conscientious member of the council. I have a passion for physics and learning in general; this would affect my contributions because my driving motivation would be to foster environments where excellent learning can take place.

Zone: 7

Name: Andrew Richardson

Chapter: Eastern Michigan University

Biography: Andrew is currently a junior Physics Research major at Eastern Michigan University. He has served as the SPS chapter president for the 2016-2017 school year and has been an active and impressive leader. Among the many events and activities that Andrew has lead, the one thing that I will mention here is that this year, Andrew started a relationship with the Science Olympiad program at a local elementary school. Every few weeks, Andrew and other SPS members visit this school to work with the

students on their projects, talk about science, and perform physics demos. This was 100% initiated by Andrew and has been a hugely positive experience for both the elementary students and our SPS members. Andrew has been able to think about ways that SPS can be more active on campus and in our community and is a fantastic leader and mentor. For these reasons, he would be an excellent AZC.

Candidate Statement: If I am elected as the associate zone councilor I will strive to complete all the duties of an associate zone councilor to the best of my abilities. I plan on being a liaison between the national council and all the chapters of zone 7. I hope to help plan and attend a zone meeting to unify the Society of Physics students in our zone. I plan on conversing with all the chapters in zone 7 to try and strengthen their chapters and share the achievements of other chapters. I will use all my strengths and skills to make our zone its best

Zone: 8

Name: Benjamin Kulas

Chapter: Middle Tennessee State University

Biography: Benjamin Kulas is a sophomore at Middle Tennessee State University. He is majoring in physics with concentrations in professional physics and astrophysics and minors in mathematics and computer science. Benjamin is currently the treasurer for the MTSU SPS Chapter and has thoroughly enjoyed participating in Zone 8 meetings and the 2016 PhysCon Quadrennial Congress. He tutors for the Physics and Astronomy department and is a member of the “Jedi Academy” telescope training program at MTSU. Benjamin plans to earn a Ph.D. and teach at the university level while pursuing a research career in theoretical physics, possibly studying quantum gravity.

Candidate Statement: I look forward to the opportunity of working with the Zone 8 Councilor to keep chapters apprised of important information and deadlines while encouraging participation in meetings and research presentations. Participating in the 2016 Quadrennial Congress thoroughly energized me, and I look forward to sharing my enthusiasm for SPS with other physics students. I am highly responsive to questions and requests, and I’ll work diligently to locate resources for chapters and members. I look forward to helping with zone meeting plans, attending meetings, getting to know more members from other chapters, and representing Zone 8 at the National Council Meeting to share our members’ ideas and suggestions.

Zone: 8

Name: Seth Kyker

Chapter: University of Tennessee Knoxville

Biography: Seth is a Junior majoring in Physics, with an Academic Concentration, and minoring in Mathematics. His current research is in Neutron Lifetime at the Spallation Neutron Source at the Oak

Ridge National Lab. He is currently an active member in our local SPS chapter and has been most active in our outreach events. He was involved in the latest PhysCon and was helpful in our planning process for that trip. His dedication to outreach to our community, as well as his willingness to help our chapter would make him a great addition to the National Council

Candidate Statement: If elected as the Zone 8 Associate Zone Councilor, I would like to focus on the education and outreach that our chapters have the potential for. I would push for more involvement, not only within our chapters, but outward toward the communities that they can serve. I feel that the education of our communities, especially the underrepresented groups, can greatly benefit from SPS involvement.

Zone: 9

Name: Adam Gronewold

Chapter: Augustana Physics and Engineering Society

Biography: Adam Gronewold is a sophomore engineering physics and applied mathematics student at Augustana College. He has served as the Secretary of the Augustana Physics and Engineering Society for the past year. His course work has included a wide range of concepts including digital and analogue circuits, quantum mechanics, relativity, modern physics, kinematics, and several engineering design courses, as well as breadth in computer science and mathematics. This last summer he acted as a geotechnical engineering intern and in mid-February, 2017, he landed a contract deal with a local engineering firm to manufacture a product. Additionally, he is currently pursuing a patent on an lock design he created as a part of his course work. He has maintained a visible love of physics and a curiosity unmatched by most students. Adam has made it clear he will put full effort into every venture he is involved with. He is excited for the opportunity to represent Zone 9 and would be very grateful to have your support in him as the Associate Zone Councilor.

Candidate Statement: As a potential Associate Zone Councilor, Adam has made a clear indication to enhance communication among Zone 9's SPS Chapters. As Secretary of the Augustana Physics and Engineering Society, he tasked himself with taking minutes at bi-weekly meetings so that the information mentioned will not be forgotten. Likewise, Adam accepted the responsibility of reminding members through email and social media of upcoming events. He will approach this opportunity in a similar manner. He believes he can effectively enhance communication in a number of ways: sending out frequent newsletters to be posted at respective schools, developing a strong email presence with professors in the region, creating community pages on social media, and continually encouraging schools to remain transparent by communicating their intentions with the others in the zone. Along with that, Adam plans to collect ideas from chapters in the region to improve Zone 9 Meetings and give schools other projects they may consider pursuing. Finally, Adam hopes to play a key role in Zone meetings and will be present in the planning by communicating directly with the organizing chapter and seeking out ways he may

assist their efforts, while simultaneously integrating his ideas for improving these gatherings. He looks forward for the opportunity and would be incredibly appreciative of your vote to represent Zone 9.

Zone: 9

Name: Samantha Pedek

Chapter: University of Wisconsin-River Falls

Biography: I am currently a third year physics major at the University of Wisconsin – River Falls tentatively planning on getting a doctoral degree in either astrophysics or particle physics. I was fortunate to have received an internship for the past two summer working on the IceCube Project. IceCube is basically a cubic kilometer telescope looking for neutrinos, a nearly massless subatomic particle, originating from other galaxies. Through my first internship based in River Falls I developed my hands-on skills primarily in optics. The following academic year I continued doing IceCube research simulating cosmic rays through various amounts of snow covering the detectors and maintained neutron monitors. Last summer I received my second IceCube internship based in Stockholm, Sweden determining whether or not a different kind of light sensor would be increase the chance of detecting extragalactic supernova neutrinos within IceCube. On my most recent adventure, I traveled to Antarctica for three weeks to disassemble two neutron monitors that were located in McMurdo Station, and collect a sample from one neutron monitor at the South Pole. After each experience I had the opportunity to present my work to many audiences, including peers and legislators. I have done this by attending several conferences and participating in poster presentations across the country, trying to share my passion with other people. I have also been fairly active in the physics community on campus. I have participated in several volunteer opportunities including outreach events with students from elementary to high school age, and public observing nights in the observatory

Candidate Statement: If elected, I would try to spread our passion for science to as many people as possible. This will require promoting a higher level of involvement and communication from all the chapters throughout Zone 9. Some of the brightest minds in the country are involved with SPS and I feel it is our responsibility to share that with our respective communities. I decided on pursuing a career in physics because it was the most challenging thing I have ever done, and my goal would be to inspire people to make the difficult decision to wonder what is out there.

Zone: 10

Name: Phoebe Sharp

Chapter: Rhodes College

Biography: Hello! My name is Phoebe Sharp and I am running for Zone 10's AZC. At Rhodes. I am pursuing a major in Physics with a minor in German. I have been a part of SPS for my entire college experience. As a freshman I was co-Treasurer, as a sophomore I was the On Campus Programmer,

meaning that I organized Pumpkin Drop, our annual Halloween event where we drop frozen pumpkins off the roof of Rhodes Tower, along with our participation in Rhodes' annual Rites to Play, where children from the greater Memphis area visit the different clubs on campus through the games or activities that they provide. And this year, I am the Public Relations officer. I have connected SPS to the many email groups and advertising organizations on campus to get more students involved from the whole campus rather than just physics majors, as well as update our Facebook and Twitter pages. I also created a partnership between SPS and Target House, the long term care facility for St. Jude Children's Research Hospital. We have brought demonstrations like the Ooblek speaker to the fire tornado to show these kids how awesome Physics is. Once I graduate, I hope to go to law school and become a patent lawyer.

Candidate Statement: As AZC, it is my responsibility to not only represent Zone 10 at the SPS National Council meetings, but to also bring together the various SPS Chapters in Zone 10. I hope to bring more chapters together, seeing as how close so many of us are geographically. As AZC, I would like to host monthly meetings (via Google Hangouts, Skype, Facetime, etc...) between executive members of each chapter to learn about major problems each chapter is facing and how we could all help out. I want to cultivate a network of resources for each chapter to have at their fingertips, meaning each chapter president being able to advise other chapters as well as the AZC with dates and connections for SPS National. I would also like to visit many of the chapters and attend their chapter meetings to get a better idea of their strengths and needs per chapter. With our Zone 10 Facebook page, I'd like to encourage chapters to post more photos and videos of their meetings and outreach events. As AZC, I want to make sure that every chapter is up to date with scholarships, awards, and other awesome opportunities from SPS National, as well as make sure all of the chapters are supporting each other and doing awesome events in their community!

Zone: 10

Name: Renée Sullivan-González

Chapter: University of Mississippi

Biography: I am a junior at the University of Mississippi majoring in Physics and minoring in Math, Spanish, and Philosophy. I have been a member of my SPS chapter since 2015 and I was the Outreach Officer and Event Coordinator of the campus Women in Physics society. I attended the 2016 Zone 10 meeting and the 2016 Conference for Undergraduate Women in Physics. I am currently studying abroad at the College of Science and Engineering at the University of Edinburgh.

Candidate Statement: Next year I will help organize the 2018 Zone 10 meeting that will be hosted at the University of Mississippi. As AZC I will address concerns of the chapters in our zone and increase communication between chapters. I also plan to collaborate with various chapters to increase involvement on campus and in the community.

Zone: 11

Name: Tori Eng

Chapter: Coe College

Biography: Victoria Eng is a junior at Coe College in Cedar Rapids, Iowa. She is originally from Roseville, California. During high school, she was avid student leaving with a GPA of 4.28, a leader in her student government and members of many clubs. Since in college, she has been the secretary of Coe College's very active SPS Chapter/Physics Club for the past two years, an officer in her sorority, and a founding member of Women in STEM club at Coe College. During her summers, she does materials science research at Coe College and has presented this research at PhysCon, CuWIP, and the All Iowa Glass Conference in 2015 and 2016. She is a determined and hard working person. When she is asked to do something, she gets it done. She is a leader in her own right and will do everything necessary to complete her goals. She loves to see everyone working together because when everyone is on the same page more gets done more efficiently.

Candidate Statement: Some plans that I have as an associate zone councilor are to connect each chapter in Zone 11, plan a successful zone meeting and try to increase attendance at SPS events. As members of SPS we have access to some amazing resources including outstanding conferences. I would love to see more students from our zone getting the opportunity to attend these conferences. I would also like to set up open communication between SPS chapters in Zone 11 to help solve some of the problems that each chapter encounters. I am hopeful for a very successful Zone 11 meeting this year and would like to continue that tradition next year.

Zone: 11

Name: Aaron J Ludvigsen

Chapter: Bethel University

Biography: I love Physics. Classroom learning, lab work, and research all inspire me to greater ambition to make a significant contribution to science that will help people and protect our environment. My goals include completing my undergraduate studies in Physics and Computer Science at Bethel University and then to earning a PhD in Physics. I plan to join a technical company after graduation. My long-term plan is to start, manage, and grow my own technology company. I engaged in research with Physicist Dr. Nathan Lindquist at Bethel in cooperation with venture company catalyst Invenshure, researching mobile applications of Surface Enhanced Raman Spectroscopy. It was exciting solving problems and accurately defining roadblocks. I utilized classroom learning, my abilities with PTC Creo (CAD app), 3D printing, and creative thinking to offer new solutions. The project is now on hiatus while its future is evaluated and planned. Invenshure's goal is to create a product from the project if a feasible market and development funds are available. I began a second project researching and replicating artificial muscles. After replicating the muscles, I worked to develop robotic applications for them. My first application was working to actuate the muscles using an Arduino Uno circuit board and then expanding that to actuate

simple limbs. The goal of this project is to demonstrate that these light weight muscles can be used effectively in robotic settings and act as replacements for motor driven and pneumatically driven systems, which are generally both heavy and bulky. I am truly driven to engage more students in positive experiences in science. In high school I helped begin an FRC robotics team and arranged for subject experts to offer classes. As captain, I made it a priority to allow students with no background in robotics to learn, contribute, and enjoy this fascinating area. I tutored elementary students in math at Maxfield Elementary. I work as a TA for Electronics and Modern Physics at Bethel. My goal is to help students get comfortable with the material

Candidate Statement: The SPS Outreach Statement states its goal is to inspire “scientific literacy while promoting public understanding of the benefits of physics education and research.” I support this ambition whole-heartedly and my past efforts as a math tutor and as a robotics team leader demonstrate this. I had heard fellow high school students say STEM classes were too difficult and boring for them. I knew my own fascination with science occurred because I engaged outside the classroom, building rockets, watching NOVA, and joining extra-curricular teams. As Captain of my Robotics Team, I ensured every student had a chance to learn about an interesting aspect of robotics and could point to some aspect of the team robot that he or she built. Our team competed in the International Championships and nearly every student talks about a STEM career. While tutoring elementary students in math, I used all my creative powers to find ways to capture their imaginations in their work. I will admit that it was difficult and my appreciation for teachers increased immensely through that experience. At some point in my future, I would like to find ways to reach those young students and fire their imaginations with the possibilities of science either through creating effective new programs or better supporting programs that are currently working. I believe all students can be effectively engaged in STEM and become scientifically literate. Making science, especially physics, more accessible and meaningful is truly vital.

Zone: 12

Name: Meg Anderson

Chapter: Society of Physics Students, William Jewell College

Biography: Meg Anderson is an undergraduate double-majoring in Oxbridge History of Ideas and Physics at William Jewell College (Class of 2019). By studying the history of both human thought and scientific progress, Meg hopes to strengthen her ability to communicate complex technical and conceptual material to a variety of audiences. Meg has lived in the Kansas City metro area since she was born, and she enjoys increasing her involvement in the community. She has experienced this especially through her work as a classroom assistant at The Nelson-Atkins Museum of Art and as a student at William Jewell College. On campus, Meg is involved in the Jewellverse Student Advisory Board, EPR physics research, the WJC First-Year Mentor program, and the student representative group for the Office of the President. Additionally, Meg is a University Innovation Fellow through Stanford. Meg has been a member of the Society of Physics Students since her freshman year, and she currently serves as the secretary of the SPS

chapter at William Jewell College. Though her home location has been consistent, Meg has traveled to forty-eight states and is excited to spend time next school year studying abroad at Oxford University.

Candidate Statement: If elected as an Associate Zone Councilor, I would focus on promoting connection and communication between the chapters within Zone 12 as well as between Zone 12 and the broader SPS community. I am excited by the vibrancy of the Society of Physics Students, and I would like to encourage its continuation. I see encouragement as involving three different areas: Zone meetings, SPS scholarships and awards, and chapter activities. I am in the process of planning the meeting for Zone 12 this spring, and I would like to help coordinate communication between the chapters within Zone 12 for next year's meeting. Additionally, I have been amazed by the many scholarship and award opportunities available through SPS. I would like to highlight these to the students within my Zone and support students in pursuing these opportunities. Finally, I think that a special part of SPS is the way many individuals come together to enjoy physics-related activities throughout the year. I would like to be in correspondence with the different chapters regarding the events that their chapters find most engaging. I could share what I learn in an article for the SPS Observer. A cool event from one chapter might just become the new favorite event for another chapter!

Zone: 12

Name: Jamal Johnson

Chapter: Pittsburg State University

Biography: EDUCATION •Pittsburg State University, KS Physics Pre-Professional 2016-Current • Andrews University, MI B.S. in Photography, Cum Laude 12/2008 •Joliet Junior College, IL MRxI Kushan Education Program MRxI Pharmacy Technician Certificate 8/2010 ExCPT Certified 5/2012 AWARDS & RECOGNITIONS •T. Bruce and Yoshiko Iwabe Daniel Scholarship for Physics •Particle Technology Labs' Exemplary Service Award •Recipient of Better Boys Foundation scholarship •Received high school Presidential Award for Academic Performance PROFESSIONAL EXPERIENCE Particle Technology Labs – Downers Grove, IL Order Entry Specialist - 5/2014 — 8/2016 •Receipt and inspection of lab samples for analysis •Training and supervision of new hires •Creation of digital project profiles and physical information files •Assessment and designation of safety ratings regarding lab submissions •Creation of local and international shipments of lab samples, both hazardous and non-hazardous •Providing recommendations regarding organization of complex methods projects to management •Answering client's order questions, and routing technical inquiries to the appropriate analysts •Ensuring essential documentation and client's requests are clear for each project submission

Candidate Statement: *+* If elected, I hope to work closely with my faculty adviser and other leadership to develop new research initiatives for my chapter. I am passionate about undergraduate research and believe that this would be the best way to get members and prospective members alike interested and active in SPS. I also hope to foster good relationships with other chapters so that we may benefit from and be inspired by the efforts of our peers.

Zone: 13

Name: Niyousha Davachi

Chapter: UT Arlington

Biography: Physics and Math major, junior, President and Founder of Women in Physics at UTA, Officer of events at UTA SPS

Candidate Statement: More involvement and communication for ALL schools in Texas.

Zone: 13

Name: Clayton Ellinwood

Chapter: Sam Houston State University- Z13 -6322

Biography: Clayton Ellinwood serves as co-president of Sam Houston State University SPS along with Andre Guimaraes. He has been active in physics and serves as a Teaching Assistant in the physics laboratory.

Candidate Statement: Clayton Ellinwood will actively participate in national SPS activities when elected as an Associate Zone Councilor.

Zone: 13

Name: Andre Guimaraes

Chapter: Sam Houston State University- Z13 -6322

Biography: Andre Guimaraes is in his second year at Sam Houston State University. He serves as a Teaching Assistant in Sam Houston State University physics labs. He serves as co-president of SPS along with Clayton Ellinwood. Andre is well-liked by fellow students, exhibits strong initiative as a TA and in his studies.

Candidate Statement: Andre will actively participate in SPS activities nationally when elected as an SPS Associate Zone Councilor.

Zone: 13

Name: Kassie Marble

Chapter: Tarleton State University

Biography: I am a junior physics and math major at Tarleton State University. My interest in physics began my senior year of high school when I took an AP Physics class. That same year I participated in Science UIL and became an alternate for the State Physics UIL Contest. Right after I graduated high

school, I worked for my father, Dr. Marble, as a camp counselor at Tarleton State University's Physics camp. I have been a member of our local the Society of Physics Students chapter since my freshman year of college. As a freshman and a sophomore I served as Vice President and this year I am the President.

I encourage students to get involved in several activities. I have been involved with the Boy Scout's Nuclear Badge, Science Olympiad's Bridge Building, and running a booth at Tarleton State University's annual Halloween Carnival. Currently, I have a few more physics demonstrations planned for this semester at several schools in our area.

I am also a part of Tarleton State University's Presidential Honor Society and I am a supplemental instructor for University Physics I. Last summer, I worked with Dr. Melconian at Texas A&M Cyclotron Institute as his REU student. I cleaned, assembled, and tested a unique prototype open-ended cylindrical Penning trap which will be used to test the electroweak force (<http://cyclotron.tamu.edu/reu-archive/>).

Over the years, I have attended many physics conferences and have presented my research at the Division of Nuclear Physics Conference (Vancouver, Canada), Tarleton Student Research Symposium (first place undergraduate research), and at the CUWIP 2017 Conference at Rice University (one of the top three posters). I will be representing Tarleton at the Undergraduate Research Day at the State Capital in Austin, and will be presenting my research again at the Joint Spring 2017 Meeting of the Texas Sections of APS, Texas Section of AAPT, and Zone 13 of the Society of Physics Students.

Candidate Statement: If elected, I will work toward encouraging other chapters as well as my own in increasing their efforts in student outreach as well as participating in Undergraduate research.

Zone: 13

Name: Daniel Morales

Chapter: Texas Lutheran University SPS

Biography: My name is Daniel Morales, I am a sophomore majoring in Applied Physics at Texas Lutheran University. I am an active member of the Society of Physics Students here on campus, helping host a variety of events we take on each year including our largest attraction for the community of Seguin, Texas: Family Physics Night. I have traveled to San Francisco and presented a poster on Family Physics Night at the Quadrennial Physics Congress (PhysCon) in November 2016. I am a Lab Assistant for calculus based physics, I help tutor those in lower level physics classes and math classes, while also working for the Physics Department by taking on small building projects for the department. I am currently the student leader for an SPS-funded research project entailing the use of drones equipped with thermal imaging systems which can track heat loss from buildings on campus. This project would help explain how efficient energy is being used on campus by constructing a thermal map of the university. When I am not doing physics work, I spend my free time playing intramural sports for the university, exercising, and reading as often as possible. Once I graduate from TLU I hope to pursue a PhD in physics and eventually become a physics professor.

Candidate Statement: As an undergraduate physics student, I would like to help my fellow undergraduates that are also members of SPS create and improve on crucial networking skills that for the furthering of their workforce careers or graduate careers. Collaborating and communicating with others in the field of physics is imperative to success with any type of study. Possible ideas could include undergraduate "modules" nationwide that would educate undergraduate physics students with the tools necessary to building a great resume for any career or application to graduate program. This is similar to the careers toolbox, but would just be more accessible for chapters that don't have fund to travel to professional meeting. I would also like to increase the amount of outreach that SPS chapters perform in their surrounding communities. With more outreach, young members of the community can have the opportunity to have many positive experience with the STEM fields and hopefully consider a similar major when they go to college.

Zone: 13

Name: Lauren Selensky

Chapter: Abilene Christian University

Biography: This semester, I'm finishing my third year at Abilene Christian as a physics student, my second year as a member of SPS, and my first year as Vice President of our chapter. Each of those roles have presented unique challenges, but each has reminded me (on a daily basis) that teamwork is essential for success: we all do better when we work together. Last Fall, I went with ACU's chapter to the San Francisco PhysCon where I met a number of incredible people and got to see what group-effort looks like at a national level. I knew then that I wanted to be more involved with the SPS community, and running for Zone 13's AZC is one way that I can reach that goal. Each of us has unique talents and insights to offer, and it's partnerships like SPS that help us help each other.

Candidate Statement: As a nation-wide community, SPS is a point of contact for students seeking to get connected academically or professionally, to foster relationships at a local or a national level, to support each other as we pursue our studies, and to pass the torch to incoming students. In the coming year, I would like to see Zone 13 involved in events and activities that will help us grow by getting connected within SPS and reaching out to our community.

Zone: 14

Name: Nickalaus S Clemmer

Chapter: Colorado Mesa University SPS

Biography: I am a mechanical engineering and physics student with a high level of motivation and considerable previous leadership experience. I have successfully been an active member in my local SPS chapter for the past two years where I have served as an officer. Below I have included some of my past work experience as well as educational and leadership experience.

Zone: 14

Name: Keegan Karbach

Chapter: Metropolitan State University of Denver

Biography: Keegan is a student of physics and applied mathematics at the Metropolitan State University of Denver. As an active member and officer of his SPS chapter, he has helped to facilitate three outreach functions with the local Boys and Girls club within the last year. He is also leading the first Physics Student Innovation organization and helping to integrate it nationally with SPS. He facilitated the breakout workshop at last year's PhysCon, reaching over a thousand undergraduate physics students. He also co-wrote an article published in the SPS journal from the same conference. He is actively researching in fluid mechanics and the generation and study of plasmas. He hopes to one day be a part of the push to make commercially viable fusion power a reality.

Candidate Statement: Keegan wants to help physics students with resources to make their academic and innovative ideas blossom, both online multimedia content and a network of local sources for entrepreneurial support and networking with like-minded individuals both in academia and in industry. Also, he would like to expand his chapter's success with outreach to a national level, giving chapters across the country ideas and systems to better help them provide outreach events to their respective communities.

Zone: 14

Name: Jamie Weiss

Chapter: University of Colorado Denver

Biography: Jamie is a sophomore majoring in Physics and minoring in Astrophysics and Mathematics at the University of Colorado Denver (CU Denver). Jamie was a reporter at PhysCon in 2016, has contributed to local science outreach with her chapter, and serves as the Secretary of her local SPS chapter. Jamie's research experience includes a new solar telescope at the National Center for Atmospheric Research and a new project this summer in astrophysics with professors at CU Denver. After Jamie graduates, she plans to go to graduate school for either physics or engineering.

Candidate Statement: Jamie plans to be very active with SPS National with the goal of communicating with Zone 14 chapters and encouraging them to come together and host Zone Meetings. She also wants to promote the importance of outreach in chapters and how connecting with different organizations is a great way to network. When chapters come together for outreach, they are turning their chapter into a community, and that is one of the most important things Jamie has learned from SPS. Jamie will attend all Zone Meetings hosted by other SPS chapters, and keep good connections with chapter officers so they can reach out and receive support whenever necessary.

Zone: 15

Name: Teddy Anderson

Chapter: University of Utah

Biography: My name is Teddy Anderson and I am a third year physics student at University of Utah. I spent my first two years of studies at Salt Lake Community College, and I will be graduating from the University of Utah upon completion of three more semesters. I am participating in Honors College courses, and I have maintained a 3.9 gpa throughout. After high school I spent nearly twenty years traveling the world working as a river guide and trekking guide. Those experiences gave me a love of science and the natural world. When I returned to school, physics was a good fit, and I brought my energy and event-planning skills to our fledgling Society of Physics Students club. Together we have worked on finding ways for undergraduates to work together on building a community, both within the department and beyond. I have begun working with one of our faculty professors on outer Solar System research, and I will continue to pursue that over the next year and a half. This semester I attended the Conference for Undergraduate Women in Physics in Boulder, Colorado. I currently work as a police dispatcher in a small mountain town, and as a part-time guide in the summer. I would like to find a research opportunity for summer 2018, and as many other ways to participate with the physics community as I can.

Candidate Statement: When I transferred to the University of Utah I immediately became active with Society of Physics Students. I began attending leadership meetings and assisting with planned events, as well as planning new events to bring more people in. I networked with local school districts and campus resources to learn about what we were already doing, and to find ways to fill the gaps in between. Last semester we judged a science fair, hosted two lab tours on campus, and had a festive end-of-semester holiday party. We raised awareness about the club, and on the ways we can grow as an undergrad community. I would like to continue to build club participation on our campus by collaborating with other SPS chapters in our zone. We at the University of Utah enjoy world-class research facilities, and it is an honor to share them with others through lab tours and lecture invitations. In another idea for school partnerships, I have been working with the College of Science on the implementation of a buddy system for students transferring from the community college. I would like to build up our local SPS chapter primarily through outreach to local schools. By bringing in freshmen and sophomores in particular, I believe we can grow stronger as a club and build longevity into the program. Giving people tangible ways to participate will enhance the undergraduate experience for all of us, as well as help build the network of future physicists in my zone and beyond.

Zone: 15

Name: Vanessa Chambers

Chapter: Utah State University

Biography: I am Vanessa Chambers, a junior in my physics program at Utah State University. I am pursuing a B.S. in Physics with a minor in English. I plan to attend graduate school in the Technical Communication and Rhetoric program at Utah State University, and aspire to bridge the gap in understanding between the science community and the interested public. My current research, in the Utah State University Physics Department Atmospheric Lab, analyzes data from the Bear Lake Observatory to investigate gravity wave propagation in the atmosphere. I have been an active member of SPS for the past 3 years. I have served as both the chapter's outreach coordinator and president. I am currently our chapter's Sigma Pi Sigma vice chairperson. My volunteer work in SPS has included monthly outreach activities and setup of radio telescope equipment for chapter research. Currently I am collaborating with another SPS member to organize a workshop for high school girls. Our goals are to foster interest in science among teenage girls and recruit for enrollment in the physics program at our university. I would love to serve as Associate Zone Councilor, so that I could broaden the scope of my service to Zone 15 and contribute to the continued success of the SPS national organization

Candidate Statement: If I am elected Associate Zone Councilor I plan to build on my predecessor's work to strengthen communication between zone chapters, and through this communication, provide camaraderie, assistance, and collaborative opportunities among chapters. I plan to implement multiple strategies to increase visibility and public awareness of SPS in the Zone. It is important to promote the services that our chapters provide for our respective communities and the benefits our organization provides to our students. I plan to promote and participate in the Society of Physics Students active Facebook page as well as create an additional group Facebook page for Zone 15 students only. I propose to create a blog for Zone 15 leaders, giving a forum for discussion and questions about chapter activities and events, particularly to share our mutual outreach efforts. I will use the Facebook page, the blog, emails, and personal phone calls to encourage currently inactive chapters to reawaken and help schools without chapters to start them. I will work with the host SPS Chapter and Idaho-Utah AAPT organizers to combine the regional AAPT Conference and SPS Zone Meeting again. This has proven to be a successful partnership, and I intend to ensure we can continue that success into the future. The size of our zone presents some logistical problems, so I plan to involve chapters in the Zone meeting that are unable to attend via skype and video streaming. SPS has always been an important part of my education. I would like to represent my Zone to facilitate for others the same opportunities SPS has given me.

Zone: 15

Name: Tyler Stokes

Chapter: Idaho State University

Biography: I am a Junior physics major and mathematics minor within the University Honors Program at Idaho State University. I currently serve as the president of the ISU SPS Chapter President. I am also a First-Year Transition Mentor (FYT Mentor) at Idaho State University and some of my duties include identifying and organizing well-attended events, inviting and accompanying my first-year students to events to increase the likelihood of a smooth transition to the university, and customizing emails to

provide relevant information to specific students at the College of Science and Engineering. During my second year at the university, I also served as a Peer Academic coach and helped found an Academic Skills Course, ACAD 450, for the training of peer academic coaches. For 8 months, I served as a physics research assistant running Monte Carlo Simulations of the CLAS12 detector located at Jefferson National Laboratory using the framework of GEANT4. I presented a poster at the Zone 15 2016 SPS Regional Conference that Idaho State University held. At present, I am serving as an undergraduate researcher in a chemometrics research lab as well. My research focuses on the quantification of corn oil adulterants within argan oil using mathematical models.

Candidate Statement: My plans are to increase participation in Zone and National Meetings. Zone 15 had a paltry showing at the Quadrennial Physics Congress, so one of my major goals is to increase participation by fostering a community mindset. To accomplish that goal Zone 15 should hold zone wide events. An example of this would be touring the unique facilities at each university. This would help create a sense of community within the Zone by giving different clubs the opportunity to meet and share their experiences.

Zone: 16

Name: Nicholas Huntoon

Chapter: University of New Mexico

Biography: Active member of the Society of Physics Students. Mr. Huntoon has served terms as Secretary, Vice President, and President of the UNM chapter of Society of Physics Students. Nicholas is currently a junior completing a dual undergraduate degree in Applied Mathematics and General Physics. Nicholas began his academic career in High School working in the laboratory of Dr. Christian Bjørnbæk. His work in the Bjørnbæk lab lead to publications in Cell Metabolism and PloS one.

Candidate Statement: Mr. Huntoon will continue to promote the Society of Physics Students through organization outreach and internal communication between the many chapters within zone 16.

Zone: 17

Name: Elijah Meyer

Chapter: University of Oregon Society of Physics Students

Biography: Elijah is currently a junior at the University of Oregon pursuing a BS in Physics and Mathematics. Elijah enjoys teaching, sharing science with others, and promoting science literacy. As such, he has participated as a Science Literacy Program Scholar where he was paired with a faculty mentor to co-teach Physics of Energy and Environment, a general education course for non-science majors. Elijah continues to develop his teaching and science communication skills by working as a Physics Peer-

Learning Assistant for the University of Oregon's introductory physics sequence and laboratory courses. Elijah has been an officer of the University of Oregon's Society of Physics Students for two years, and in October, was elected co-president. As co-president, Elijah is striving to grow the club and develop it in such a way as to have a broader impact on his community. Club membership has doubled since last year and the chapter has implemented some exciting new programs. Our chapter has implemented an outreach program where volunteers travel to local elementary schools to perform physics demonstrations and several officers are currently forming a journal club for women in physics.

Candidate Statement: As Associate Zone Councilor, Elijah will work diligently to fulfill his duties. His personal interests strongly align with the Society of Physics Students' mission and purpose to develop effective communication and personal interaction skills and to gain leadership experience. Elijah is looking forward to the opportunity of creating a strong network between the Zone 17 chapters. He is excited to have the opportunity to have a real impact within the scientific community not only within his own zone, but across the country. Elijah is enthusiastic to work directly with the Zone Councilor, as they are located at the same institution, and is looking forward to strengthening Zone 17 as a whole.

Zone: 17

Name: Riley Troyer

Chapter: University of Alaska Fairbanks Society of Physics Students

Biography: Riley Troyer is the current vice president of the University of Alaska Fairbanks chapter of the Society of Physics Students. In addition to his consistent strong academic performance as a physics undergraduate, Riley is a dedicated member of SPS. He has a habit of going above and beyond for his chapter and has even organized two SPS Stargazing Party events, in which over 300 community members attended. Currently, Riley is helping to organize a trip for renowned physicist, Dr. Lawrence Krauss, to speak at his university. He also helped lead a dozen members to the 2016 PhysCon event in San Francisco and has plans to attend the SPS Zone 17 meeting in April of this year. Recently, Riley has accepted a summer internship through the national SPS organization in Washington D.C., which will provide him professional experience for his future plans of working in science policy. As a lifelong Alaskan, Riley is an avid cyclist and outdoor enthusiast and participates in many diverse community events. His leadership, and hard work and dedication in promoting a genuine love of physics to the public prove an inspiration to those around him.

Candidate Statement: As the Associate Zone Councilor I will strive to make an even more connected zone 17. Despite long standing SPS chapters in my state of Alaska, we have often been isolated from the rest of the zone. It is my goal to change that. Alaska has many unique physics opportunities, particularly in space and auroral physics; I would like to share these with all the students in zone 17. In our connected world I see no reason why we cannot make this unity become reality. I will also work to increase the enrollment of physics majors and SPS members in our zone. As a student in a small physics department I understand the importance of enrollment to the success of a major. I do not wish to see any physics program close their doors. I will do this by coordinating a series of outreach events and social media

campaigns aimed at high school students, college students and local communities. In addition, at the national level I will advocate for funding for our zone to help with travel and outreach expenses.

Zone: 18

Name: Christian Billings

Chapter: Society of Physics Students of Loyola Marymount University

Biography: Currently attending Loyola Marymount University in California. Majoring in the field of physics. Has tremendous involvement within the university and elsewhere. Played football and baseball as well. Graduated with a diploma from elementary education, middle school education, high school, and now is enduring an undergraduate degree. Is pursuing a final doctorate degree when education is complete and is still willing to learn. Has experience through volunteering, software, and hands on equipment.

Candidate Statement: If elected, the number one goal would be to create expansion and promote the significance of physics within the country of ours. At one point the USA was ranked number one in the math and science rankings international. It is time for us to become relevant once again to the rest of the world and show them our true identity. The lack of American workers within the fields of math and science has been prevalent as noticed. Most software programmers, mathematicians, and scientists that are working in the USA are people that were educated in India, China, Japan, and Finland. It is not to say that these people are not deserving. It is just embarrassing how there is no initiative for people who actually live here and want to make a difference. Secondly, it would be ideal to emphasize how important math and science is to the younger generation. Before, children would have an enthusiasm to learn math and science. They would be thrilled when going into the classroom. Now, it is as if they are just doing it because they are forced to. Thirdly, who would not want to work in a world that is continually increasing? For example, this is prime time for anyone who is looking to work in these relative fields. Employers are seeking young educated people to join their companies and assist the workforce. As technological advancement continues, it would be foolish not to be active in this era. In conclusion, these three primary motives summarily describe the pro activity that I would activate if elected.