



SOCIETY OF PHYSICS STUDENTS

Associate Zone Councilor Candidates

2019-20 National Council

Ballots Due: May 1, 2019

For more details, visit:

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

Zone: Zone-1

Position: Associate Zone Councilor (AZC)

Name: Molly McDonough

Chapter: Suffolk University

Biography: Molly McDonough is currently serving as the AZC for Zone 1 and the President of her university's chapter of SPS. She is attending Suffolk University for a Bachelor of Science in physics with a minor in computer science. She is very active inside her school's department and out. She is currently serving on the National Council as the AZC for Zone 1 and the co-chair of the Centennial Recognition Committee. Additionally, she is launching a non-profit called Lightspeed Science to benefit minorities and women in STEM and encourage them to succeed through mentorship.

Candidate Statement: I plan to work to continue to create more connections between SPS chapters within Zone 1 and build a greater connection between local SPS chapters and the national office.

Zone: Zone-2

Position: Associate Zone Councilor (AZC)

Name: Robert Melikyan

Chapter: Ithaca College

Biography: Robert is a rising senior at Ithaca College on track to receive a B.S. in Physics by May of 2020. Raised in rich background of musical theatre, dance, and vocal performance, Robert is uniquely capable in communication, flexibility, enthusiasm, leadership, and dependable performance when it most counts. At college, Robert immediately gravitated towards positions of leadership, becoming the youngest treasurer of Ithaca College's historic all-male acappella ensemble during his freshman year. During his junior year, Robert's focus shifted towards using his leadership for the betterment of the Ithaca College SPS chapter. Since being selected as the treasurer, Robert has ensured the full funding of 12 students to attend this year's annual APS March Meeting, along with successfully planning, funding, and hosting a sincere and touching talk on "Diversity and Representation in STEM". With more events to come this year, and his role as chapter president to come with next semester, Robert looks forward to encouraging an even more engaged and supportive physics community at Ithaca College with further opportunities for students to educate themselves and develop important technical skills outside of the classroom through workshops and department research projects. Personally, Robert's research and career interests lie in aerospace. He is conducting his senior thesis research on non-gravitational forces in effect on asteroids, with the opportunity to continue this research at the head of operations for NASA's OSIRIS-REx mission in Arizona this summer.

Candidate Statement: As an Associate Zone Councilor, Robert wishes to use his role as an undergraduate, to further the visibility and importance of SPS in the undergraduate physics communities of the USA. For undergraduate students, proper integration into the physics community can be perilous, through his leadership, Robert would encourage excellent interaction between the chapters of his zone, with plans to develop a zone meeting already underway with his local presidency at Ithaca College's SPS chapter.

Zone: Zone-3

Position: Associate Zone Councilor (AZC)

Name: Jasmyne Emerson

Chapter: Seton Hall University

Biography: Jasmyne is currently a freshman B.S. Physics student at Seton Hall University with a 3.94 GPA. A recent graduate of the Marine Academy of Science and Technology, she plans on eventually pursuing a graduate degree in Medical Physics.

Currently, Jasmyne is a student researcher in a lab at Seton Hall that develops high efficiency solar cells as alternative solutions for the world's clean energy generation problem.

Candidate Statement: If elected, Jasmyne plans to encourage more zone meetings. She believes that zone meetings are essential to the success of each and every physics student. At zone meetings, students are able to create connections with people they wouldn't have otherwise, giving themselves and others new opportunities to show their passions on the specific fields of physics that they love.

Zone: Zone-3

Position: Associate Zone Councilor (AZC)

Name: Elyzabeth Graham

Chapter: Juniata College

Biography: I am a rising sophomore at Juniata College pursuing a double major in Physics and Russian. I have studied physics at the undergraduate level, as well as calculus and electronics. I am currently working on an astronomy independent study project with the observatory on campus as well our new remote observatory off campus. I am preparing to spend the summer at an intensive Russian language program in St. Petersburg where I will be learning Russian through immersion to accelerate my language acquisition. I intend to combine my interests and work in diplomacy through science for the United States and Russia by collaboration between the nations to make scientific advancements. I currently work in a program called Language in Motion, which seeks to inform primary and secondary education students about studying abroad and all of the great opportunities and experiences that can come from an international education. I hope to combine that with the Science in Motion program that my college also offers to teach children about the benefits of learning science in conjunction with language and cultural education for them to become global citizens.

Candidate Statement: If elected, I intend to work with chapters to encourage outreach to other science, technology, engineering, and mathematics departments and interdisciplinary groups to generate more interest in physics. I also would like to promote the collaboration of SPS zones and extend zone meetings so that other colleges and universities can share their experiences and achievements in our field. I believe that spreading news of accomplishments in our field as well as discussing setbacks to progress are essential to growing and developing scholars. The better individuals are informed about the expanses of physics, the better physicists they will be. I also want to do advocacy work with independent groups that support women in physics and across STEM disciplines. I hope to expand SPS by endorsing and inspiring SPS members to participate in female advocacy to show that being a

proponent for women in science is not something for women exclusively. Overall, I hope to foster a sense of community and empowerment in my zone and while strengthening the physics community through this position in the Society of Physics Students.

Zone: Zone-4

Position: Associate Zone Councilor (AZC)

Name: Razan Hamed

Chapter: Roanoke College

Biography: I am a sophomore / rising junior at Roanoke College. I am majoring in Physics and triple minoring in Math, Psychology, and Computer Science. I am also the founder and the president of the Astronomy club at my school. Speaking of my other activities, I'm a senator in the Student Government Association and the president of Habitat for Humanity club.

Candidate Statement: My goal is to share what Roanoke College's SPS chapter does with other groups from different colleges and universities. I'm also looking forward to starting conferences for young physicists from high schools and middle schools and share our experience with them. That could be extended to summer physics camps as well.

Zone: Zone-4

Position: Associate Zone Councilor (AZC)

Name: Leif Kvarnes

Chapter: Randolph College

Biography: Leif Kvarnes is going to be a senior physics major at Randolph College next year. He has been a Randolph College SPS officer each year since his sophomore year. Leif is currently the Chair of the College's largest outreach activity - the Randolph College Science Festival - which impact well over 3000 people each year, bringing speakers, movies, and hands-on activities to campus for the public. This past fall, Leif led an SPS project in which our chapter built a costume for a child in a wheelchair in a competition called hallowheels - we built a Cinderella's carriage - and the project won the top award. This summer, Leif will be working on a summer research project with the physics and chemistry departments at Randolph College, in which he will be developing wear tests for antimicrobial surfaces.

Candidate Statement: I would like to be in the Associate Zone Counselor position because I would like to organize more inter-college activities between Randolph College and regional SPS clubs. I think that a stronger scientific community could be formed by combining our efforts for public outreach events, building projects, research projects, and social events.

Zone: Zone-4

Position: Associate Zone Councilor (AZC)

Name: Ryan Pindale

Chapter: University of Maryland

Biography: Ryan is finishing his second year at the University of Maryland, pursuing a double degree in Physics and Applied Mathematics, and an honors citation in the Entrepreneurship and Innovation Program (EIP). For his EIP capstone project, Ryan is currently working with two other honors college

students to create STEMerge summer camps: a STEM career-oriented summer camp for girls between the ages of 11 and 15. He is working to organize the logistics of a summer of 2020 launch, while developing a working curriculum for the kids. Ryan is also a first semester S-Stem Scholar, and is currently writing a journal article on the selection process for the Nobel Prize in the Sciences. He also works as a TA for PHYS 273: Waves during the week, and a photo booth attendant on the weekends. Ryan continuously finds a way to balance his course load, and his impact in the physics and STEM community. He is looking to continue this trend into his junior year.

Candidate Statement: As an undergraduate in the physics department at UMD, I have been part of the SPS community and understand how significant and beneficial SPS is to our campus and to institutions of high education across the country. I will work with our national SPS and Sigma Pi Sigma leadership to further the interests and needs of the physics undergraduate community to create the best possible future experiences for everyone involved. I believe that my previous activities noted in bio have prepared me to take on this important position in the physics community.

Zone: Zone-5

Position: Associate Zone Councilor (AZC)

Name: Caroline Evans

Chapter: Davidson College

Biography: Caroline Evans is a junior Physics and Hispanic Studies double major at Davidson College. She has researched with two professors at Davidson, the first time analyzing the intensity, center velocity, and optical depth for sight lines toward a variety of molecular clouds (focusing on HI and OH) and is currently utilizing strategic event selection to determine the viability of detecting the vector portal dark matter model in a variety of detectors. Beyond being an active member of SPS since her first semester of college, Caroline has experience in leadership from her term as house manager in her 200+ person social and philanthropic group, Turner House, and as a veteran tour guide who now mentors newer guides as well. After junior fall abroad in Chile, Caroline is excited to re-involve herself with Davidson's chapters of SPS and Women in Physics to best share her excitement for all things physics. She hopes to continue on to graduate school to earn a PhD in astrophysics.

Candidate Statement: Since physics, like any science, is dependent on productive collaboration, as Associate Zone Councilor I want to shape and grow relationships between chapters. To make this happen, I would advocate for more zone meetings and for increased ability to attend these meetings hosted by other chapters. Since each chapter of SPS gives a framework for a sense of community among people interested in physics, I would hope to grow that network in these zone meetings, increasing camaraderie between the host institution, the host chapter, and visiting chapters. I'm excited to see the future of Zone 5.

Zone: Zone-5

Position: Associate Zone Councilor (AZC)

Name: Nolan Roth

Chapter: High Point University

Biography: Originally from the town of Yutan, Nebraska, Nolan graduated high school before moving to Boone, North Carolina and attending High Point University as a double major in physics and computer science with a minor in mathematics. He is will be a senior during the 2019-20 school year on that track and is heavily involved in the High Point University SPS Chapter as current treasurer. Much of Nolan's work is in the biophysics and computational physics fields, and he will be working at NASA's Goddard Space Flight Center during the summer of 2019 through the SPS Internship Program.

Candidate Statement: I had the opportunity to represent Zone 5 as the Associate Zone Councilor over this last year. This has given me amazing experience as a member of the National Council of SPS and has given me insight into the administration of the SPS Zones and organization on a national scale. It also let me work on the smaller scale--I was able to meet with up-and-coming SPS chapters during our annual Zone Meeting last fall and advise them on methods to grow their chapter and become more active. I believe that bringing this experience into a second term as Zone 5's AZC will help me continue to improve!

This summer, I will have the opportunity to work in the SPS Internship program. I hope to bring this firsthand experience with opportunities given to me through SPS to increase awareness and applications throughout Zone 5 next year. I will also push myself again to go above and beyond the duties of an AZC as an active member of the National Council and as a liaison between the chapters of Zone 5 and the SPS National Office.

Next spring, High Point University will be hosting the NC-AAPT and SPS Zone 5 meetings! If elected to AZC again, I will have amazing flexibility and accessibility with planning. I will be able to give immediate updates to the Zone to help with travel plans to the meeting. I hope to make this next year the best one yet for Zone 5!

Zone: Zone-6

Position: Associate Zone Councilor (AZC)

Name: Kevin Fernando

Chapter: University of Central Florida

Biography: I'm currently a junior Physics and Mathematics major at the University of Central Florida. I'm a dual citizen on the United States and Switzerland. In high school I was on the soccer and weightlifting teams, and I enjoy remaining active today. Currently I'm conducting research in non-local transport theory with one of our resident faculty members, Dr. Patrick Schelling. Outside the classroom I'm involved in a lot of outreach events trying to get K-12 students involved and interested in science.

I have been involved in SPS since my first year in college. Last year I was vice-president of my chapter and was able to help bring our chapter to the forefront; we won the 2017-2018 outstanding chapter award, and hosted current vice president of the APS, Dr. Jim Gates, for our honor society induction ceremony. I currently serve as the president of my SPS chapter and have had the pleasure of implementing a peer mentor program, hosting faculty discussion panels, running many large-scale events, and holding successful fundraisers. One of our biggest events happened this last fall called "Raspberry Jam." This conference style event included over 100 RSVPed faculty, graduate, and undergraduate students from 5 different Florida universities, to come and discuss cutting edge Raspberry Pi research.

Candidate Statement: I believe SPS is an integral part of the undergraduate physics community. As such, I want to increase inter-chapter communication within zone 6, organize zone wide events to incentivize extended communication, and help chapters prosper by helping members become professionals. I believe I can achieve these goals due to my extensive experience in achieving similar goals while in office for my local SPS chapter. In addition to this, I plan to help support chapters in sending students to conferences, promote outreach to the broader community, and promote individual students to be more active in SPS on the national scale.

As president, I have noticed that one of the most compelling ways to increase student involvement is to support them working on their own projects; I plan to help chapters in my zone to do exactly that. Lastly, increasing communication between chapters is something that must improve. During my time in SPS I haven't seen a significant focus on this type of collaboration, which has led to many people feeling isolated and disconnected from the broader SPS body, I want to change this and have decided that it will be one of the main foci of my term.

Zone: Zone-6

Position: Associate Zone Councilor (AZC)

Name: Ishan Saran

Chapter: Emory University

Biography: Currently a second-year student studying medicine (pre-med) and physics at Emory University. Research in biophysics. Been a member of SPS for one year, serving as a Demo Coordinator, building various physics demos and showcasing interesting physics phenomena.

Candidate Statement: If elected, I will do all I can to promote physics and the spread my love for physics. I will fulfill all my duties as an Associate Zone Councilor and facilitate community and camaraderie amongst all SPS members.

Zone: Zone-7

Position: Associate Zone Councilor (AZC)

Name: Abigail Ambrose

Chapter: The College of Wooster

Biography: I am currently a junior physics major at the College of Wooster. For the 2018-2019 academic year, I have served as president of the Wooster Society of Physics Students chapter as well as the Astronomy Club and Wooster Women in STEM. Next year, I will also be serving as the president of the Wooster SPS chapter and Astronomy Club. In these roles, I have run weekly meetings, organized events and outreach, and had the opportunity to help organize the Spring 2019 Zone 7 meeting. I have also had the opportunity to work on forest fire research at Wooster, carbon nanotube research at the University of Utah, and I just started work on dark matter distribution with one of my professors. Through research and leadership positions, I have had the opportunity to strengthen skills in communication and teamwork. When I am not doing physics things, I enjoy playing marimba in band and dancing as part of the Blackbirds Irish dance team at Wooster.

Candidate Statement: If elected, I would like to help foster interactions between chapters outside of just the typical zone meetings. This can include smaller chapter meet-ups for chapters which are closer together. This could range from meeting for coffee at a favorite shop close to the neighboring chapters to visiting one another's schools for a Saturday to hang out and talk about specific programs at their schools. There could also be a blog and discussion page to ask questions between chapters and share outreach and other event ideas. This would help to facilitate chapters which would like to grow various programs. This blog would be open to the entire zone for posts in order to share ideas more easily.

Zone: Zone-8

Position: Associate Zone Councilor (AZC)

Name: Justin Craig

Chapter: Millikin University

Biography: Justin Craig is currently a sophomore at Millikin University studying both Physics and Mathematics. He serves as the Student Assistant at the Requarth Observatory at Millikin and is both the Lab Assistant and Peer Tutor for the astronomy classes at Millikin. As well, he has participated in a number of dark matter research projects with his physics professors at Millikin. Justin is also the current AZC for Zone 8.

Candidate Statement: With the current experience as the Zone 8 AZC, Justin would like to continue the work he has done. His focus, if elected, would focus on bringing more chapter engagement with the SPS National Council. This includes encouraging chapters to apply for awards and trying to encourage chapters to attend national/regional physics conferences. He will also focus on improving communication between chapters and the SPS National Council.

Zone: Zone-9

Position: Associate Zone Councilor (AZC)

Name: Aaila Ali

Chapter: DePaul University

Biography: Aaila Ali is an undergraduate student studying Physics at DePaul University and Computer Engineering at the Illinois Institute of Technology with an interest in quantum computing and a strong desire to give back to the scientific community. She joined the DePaul University SPS chapter her freshman year, served as a officer, and then served as president of the chapter in the following years. Aaila currently the associate zone councilor of the Society of Physics Students (SPS) for Zone 9. Aaila works to organize events to create a nurturing community to help advance physics students of all backgrounds in their professional development and academic success. She successfully turned the previously quiet SPS chapter into a welcoming community and resource for all students, and helped co-found the Society for Women and Gender Minorities in Physics (SWiP) at DePaul University. Over the course of her undergraduate career, she has interned in cyber security, worked as a student researcher on a Sloan Digital Sky Survey Faculty and Student Team (SDSS FAST) at DePaul University, and participated in a NSF funded REU at the University of Utah in spintronics. Aaila will be interning with IBM research the summer of 2019, she has a passion for research and plans to pursue graduate studies in the future.

Candidate Statement: Aaila realizes that issues Zone 9 chapters face include maintaining an active chapter during leadership transitions and holding successfully fundraisers. Not being able to properly fundraise means chapters struggle to host events and to send members to attend events. As Associate Zone Councilor, one of Aaila's primary objectives has been working to find out which chapters are most active and connecting them to nearby chapters which may be struggling to stay active. She has worked to bring the Chicagoland SPS community together through city-wide SPS events, hosting board game nights and helping chapters host regional Zone Meetings to help chapters find ways to hold successful fundraisers and realize the financial resources available to them. Aaila hopes to be able to assist as many chapters as possible to send students to the 2019 Physics Congress, and plans to make fundraising a central goal if re-elected as AZC. Her other goals as include supporting students looking for opportunities to perform undergraduate research and supporting chapters in the zone meet their social, academic, and professional goals through professional workshops, networking, and fundraising. From experience, Aaila knows that SPS chapters have the potential to provide a supporting community to students, and allow them succeed in all stages of their academic careers.

Zone: Zone-9

Position: Associate Zone Councilor (AZC)

Name: Georgia Votta

Chapter: Augustana College

Biography: Georgia Votta is a sophomore undergraduate at Augustana college double majoring in Physics and Applied Math. She is actively involved in Augustana's chapter of SPS as Secretary. Through her position in SPS, she has helped with a number of physics-related events both on and off campus.

Because of this, Augustana's chapter was recently awarded the Marsh W. White Award to do an outreach program at a local elementary school in late March. Georgia is also a Physics tutor and a laboratory Teaching Assistant. When she isn't doing physics, Georgia spends her time being active outside and plays the trumpet in Augustana's Symphonic Band and Orchestra. This summer, Georgia will be working with a faculty member in nuclear physics research. Once she graduates from Augustana, she plans to go to graduate school to get her Ph.D in Physics.

Candidate Statement: As Associate Zone Councilor for Zone 9, my main goal is to increase communication between SPS chapters within our zone. Much progress can be made by setting up group video calls and email correspondence to plan events and to network with each other. This will allow us to plan future zone meetings more efficiently. I am invested in my local SPS chapter, so I plan on having more members from my chapter attend these zone meetings. By attending the SPS Council Meeting, I will be able to bring back valuable information both to my chapter and the other chapters in zone 9. I will continue to serve on the executive board of my chapter during my time serving as AZC.

Zone: Zone-10

Position: Associate Zone Councilor (AZC)

Name: Swapnil Bhatta

Chapter: University of Southern Mississippi

Biography: I am an undergraduate double majoring in physics and mathematics at the University of Southern Mississippi. I have been actively involved in the Southern Miss SPS chapter since my sophomore year, participating in various outreach programs, and currently serve as the president for the chapter. My academic research interests are primarily in computational physics and astronomy.

I have held other executive roles in my chapter and have been a part of various student leadership summits at my university. I believe I possess the creativity and diligence required for the position.

Candidate Statement: If elected for a second term, I plan on building on the goals we set for Zone 10 last year. The primary focus for my last term was effective communication between the national office and individual chapters, with the ZC and AZC being the channels. This year I'd like to implement the feedback received from chapters and guide them towards the resources available from SPS national. I'd also want to work with chapters individually and assess their problems based on their chapter reports. My other primary goal for this year would be fundraising ideas and strategies a chapter can implement to generate funds for hosting events, educational outreach or participating in PhysCon 2019.

Zone: Zone-10

Position: Associate Zone Councilor (AZC)

Name: Joseph Dees

Chapter: Henderson St University

Biography: Joe is a non-traditional student who has had over 15 years of management experience. He is a hard worker who is currently the Treasurer for the local chapter of the SPS. He also is the President for the local chapter of the ASEE.

Candidate Statement: If I am elected Associate Zone Councilor I hope to further promote the SPS throughout zone 10 by reaching out to students who are not only involved in Physics, but also those that have a passing interest in physics. By sharing my love for math and science and providing an outreach for those that share the same interests. I also pledge to assist the zone councilor to the best of my abilities. Finally, with Physcon 2019 quickly approaching, my lighter coursework schedule will allow me to focus on helping this to be a smooth and successful conference.

Zone: Zone-10

Position: Associate Zone Councilor (AZC)

Name: Luis A. Rey

Chapter: University of Memphis

Biography: Junior physics major, doing computational physics and Astrophysics research. Projects including heat transfer applications on aerogels for self-healing using FEA, HST Seyfert galaxy research, research on intermediate mass black holes in Dwarf galaxies.

Candidate Statement: I plan to make SPS more prominent in my zone as well as work with different companies to provide opportunities for physics majors.

Zone: Zone-11

Position: Associate Zone Councilor (AZC)

Name: Jonathan Hulscher

Chapter: South Dakota School of Mines and Technology

Biography: I was born in Minnesota, and I am now a South Dakota resident and local vice president at South Dakota School of Mines and Technology. Professionally, I am an aspiring neutrino physicist looking forward to research at DUNE in the fall. Deciding to attend college at SDSMT was fueled by my love of experimentalism and the opportunities at SURF to get my hands dirty building the physical parts of international research projects. I have been a midwestern resident my whole life, ridden out the snowstorms, and suffered through the howling winds the plains. I hope to say I will leave a small impact on a year of your time by giving you a great zone meeting and serving on the national council as your representative.

Candidate Statement: Last year upon a disconcerting zone meeting, a few students of SDSMT decided to be a positive change upon zone 11. If you attended the zone 11 meeting earlier this year planned partially by our current SDSMT AZC, you know what caliber to expect. I aim to rival or surpass our current AZC's, a personal friend, event as we learn each year and prove our dedication toward making meetings helpful, fun, and engaging for every student in attendance.

Zone: Zone-11

Position: Associate Zone Councilor (AZC)

Name: Martha Rose Jesuit

Chapter: Coe College

Biography: Martha Jesuit is a sophomore undergraduate student at Coe College studying physics and math. Currently, she is the physics club secretary and the math club vice president, but her leadership roles are not limited to these two clubs. You could also find her in the music department where she plays her trombone and sings in the choir. Outside of her extracurricular activities on campus, she is also involved in research with the physics department. Her research on thermal and structural properties of glass have gotten her noticed by Clemson University where she spent a weekend touring their graduate departments for the STEM All In program. Martha also has one published paper with Penn State University on the topological constraint model for tellurite glass, and one pending publication with University of California, Davis on the structure of amorphous tellurium dioxide using nuclear magnetic resonance. Research conducted by Martha has taken place at Coe College, Argonne National Lab. Future work is to head to Rutherford-Appleton Laboratory from June 30- July 12 to work with Alex Hannon on analyzing the x-ray diffraction data from Argonne National Laboratory on tellurite glasses, then go to the University of Athens to work on perfecting the water-quenching method to form bulk amorphous tellurium dioxide. Thermal and structural properties of TeO₂ glass was presented as a talk at the International Glass Conference at Cambridge University in 2018.

Candidate Statement: One concern that I would like to work on is advocating for more conferences like the Conference for Undergraduate Women in Physics (CUWiP). I attended the conference in 2018 but

was not accepted due to a high number of applicants. Their reasoning for me to not get accepted was that I have already attended once so I should give my spot to someone else. Although, people from my school have attended CUWiP for three years in a row and were still able to attend. The Society of Physics Students is always writing about encouraging and supporting women in physics but were tossed to the side and being told they are not allowed to attend these conferences is very discouraging and frustrating. I want to work on communication between conferences and make sure that everyone gets an equal chance to attend different conferences and events. There is absolutely no reason that everyone can't go to a meeting all about women in physics.

Zone: Zone-11

Position: Associate Zone Councilor (AZC)

Name: Brigette Smith

Chapter: Coe College

Biography: I am currently a Junior at Coe College going into my senior year. I am majoring in Physics with minors in Mathematics and Chemistry and am currently conducting research on high density glasses for various detectors. I am extremely passionate about science and building a stronger community among scientists. I am heavily involved in outreach at my institution and was the 2018 SPS Outreach Intern. My experiences have taught me effective ways to facilitate communication between scientists both collaboratively and socially. Additionally, my experiences have taught me efficient methods for conducting meetings and planning events. I believe that these qualities will allow me to excel in this position.

Candidate Statement: If elected as the Associate Zone Councilor I intend to help plan zone meetings and look into ways to increase networking at these event in such a way that reduces the initial awkwardness of introducing yourself, which is usually the biggest deterrent to students wishing to connect with others. I can attest to the uncomfortable feeling that accompanies some traditional icebreakers as someone who was very intimidated as a younger student. I hope to help create and incorporate more activities that require students to collaborate in a way that allows them to slowly and more naturally get to know each other. This will allow them to develop a stronger foundation for a relationship going forward and hopefully allow them to connect on a deeper and more personal level. I would also like to help create more opportunities for students within our zone to have a chance to network. This will lead to stronger relationships and chances for students to learn about programs or projects that are happening nearby. I firmly believe that the most valuable asset to any student is a good support system and that creating these opportunities for students to develop lasting relationships with other students who have the same interests and goals will help motivate them to do well. More importantly it will also provide them with a group of like-minded individuals who they feel comfortable opening up to and who would be willing to provide encouragement and a helping hand through difficult times.

Zone: Zone-11

Position: Associate Zone Councilor (AZC)

Name: Isobel Snellenberger

Chapter: Minnesota State University Moorhead

Biography: Hello! My name is Isobel Snellenberger, and I am a student at Minnesota State University Moorhead. I am a physics major with an astronomy minor. I am currently conducting research with Dr. Matthew Craig as a part of NASA's TESS Follow Up Program. I plan to continue this research next year, as well. I have been fortunate enough to present this research at the Conference for Undergraduate Women in Physics (CUWiP, 2019), the Conference for Undergraduate Women in Physics Sciences (WoPhyS, 2018) and also the American Association of Variable Star Explorers Annual Meeting (AAVSO, 2018). This academic year I was lucky enough to be selected as my SPS chapter's secretary, which has been incredibly rewarding as well as super fun. I love how our chapter always strives to do more community outreach than we ever have in each passing year. I hope to continue to hold officer positions in SPS for the remainder of my time here at MSUM. Society of Physics Students has provided me with so many irreplaceable experiences and friends in my time as an undergraduate so far, and I want to help and facilitate that feeling for other students.

Candidate Statement: One of my largest goals for SPS as a whole, as well as my individual chapter, is for us to have a larger focus on diversity and inclusion. We have a strong community and we can only be made stronger by striving to harbor a more inclusive environment. I want to work to make sure that marginalized groups have the representation they deserve in every branch of SPS from national positions down to individual chapters. Making everyone feel welcome in SPS will make us a stronger, more effective and all around better community. I feel very passionately about encouraging students from all walks of life to pursue not just physics, but every STEM field. I've had a great time sharing my ideas and passions with other students at past zone meetings, and I would love to have a hand in facilitating that experience for other students.

Zone: Zone-11

Position: Associate Zone Councilor (AZC)

Name: Peter Voller

Chapter: Coe College

Biography: I'm currently a junior physics major at Coe College. Since the beginning of my college career, I've been actively involved in SPS and my local physics department. I've participated in two Zone 11 meetings and countless outreach physics events. In addition, I've held the position of Philanthropy Chair for a local fraternity for two years, meaning I'm had plentiful experience coordinating people, fundraising, and event planning. I've also been the Physics House Representative, meaning I've personally worked to increase participation in my physics department's events and activities. I've also talked with previous Associate Zone 11 Councilor, Tori Eng, and current Associate Zone 11 Councilor, Michael Thompson, about this position. From their input, I feel confident in my ability to advance SPS within my zone and to accomplish the obligations of Associate Zone Councilor.

Candidate Statement: My first primary goal if elected would be to guarantee that the yearly zone meeting runs smoothly for everyone involved. I have been a part of two successful Zone 11 meetings, therefore I know the structure and organizational skills required for the position of Associate Zone Councilor. In addition, I have experience as the Philanthropy Chair of the fraternity Phi Mu Alpha and as the Physics House Representative. These positions have given me the know-how in event planning, communicating with people, and motivating people to show up to the events.

My other primary goal would be to entail greater communication between chapters within a zone. This is to promote a sense of a physics community outside each chapters campus, to promote attendance at the yearly zone meeting, and to encourage chapters to go to Physcon. These goals would become a reality by putting online communication and teleconferences to use. Chapters can learn from one another and exchange information on how to improve chapters since some physics departments struggle to be a strong presence in their departments and campuses. Ideas about fundraising, outreach events, student involvement, and more can circulate to everyone's benefit.

In addition to these two goals, I have other, secondary, ideas that are less ambitious but are still worth pursuing. I would like to focus on the importance of utilizing alumni. I would also like to bolster the various jobs physics students get to give current undergraduates a sense of the range of careers that are available for them to pursue.

Zone: Zone-12

Position: Associate Zone Councilor (AZC)

Name: Pujita Ravichandar

Chapter: Truman State University

Biography: Pujita is a third-year undergraduate student majoring in Physics at Truman State University (class of 2020). She has lived in the St. Louis area since she was born and has consistently been involved with the local community through volunteering and club involvement; she also has continued this in college. Through Truman's Women in Physics Club she has organized and helped plan outreach events for students in the local community, through Stargazers Astronomy Club she has participated and engaging the public in the night sky during the astronomy open houses hosted at the observatory, and she has spent time inspiring the general Truman physics community through her involvement with the local Society of Physics Students (hereafter SPS) chapter. Pujita is currently involved in Astronomy research under Dr. Vayujeet Gokhale. She is the President of Women in Physics, Vice President of the Society of Physics Students, and has previously served as the Secretary and Webmaster of Stargazers Astronomy Club. She enjoys leadership roles and inspiring others to pursue physics and get involved in STEM.

Candidate Statement: If elected as Associate Zone Councilor, I plan on focusing on connections between the SPS chapters through Zone 12. I plan on doing this by ensuring that our zone holds an annual Zone Meeting. I have helped with the Zone Meeting hosted by the SPS chapter at Truman State University in the Spring of 2018 and would like to contribute to the plans for the next meeting. In addition to increasing inter-zone connections, I strive to connect our zone with others across the country. I believe that it is important to encourage the SPS chapters to engage with the broader national SPS community. I plan to act on this by keeping the chapters informed on upcoming conferences and encouraging them to attend these events, such as PhysCon 2019. SPS has given me an amazing and supportive community of physics students and has inspired me to share these valuable connections with others. I hope that the SPS chapters in Zone 12 will be more in contact with each other so we can learn from each other. I plan on doing this by keeping the Zone 12 Facebook group recently created by Meg Anderson (the current Associate Zone Councilor) active. I hope to use this accessible digital platform to keep the SPS chapters connected and updated on important news and upcoming conferences. I hope that increasing communication between SPS chapters will build an even stronger community of physics students!

Zone: Zone-13

Position: Associate Zone Councilor (AZC)

Name: Austen Adams

Chapter: University of Texas at Dallas

Biography: Austen Adams will be a Senior physics major at the University of Texas at Dallas for the 2019-2020 academic year, and has been very active within the university's chapter of SPS throughout his years there. From being an active member, participating and helping out with multiple events, to becoming an officer and working to organize the future of the chapter. Austen has lived in Texas for most of his life, and when he's not working on and around campus, he spends time back in north Austin with his family. On the occasion when he isn't working on physics, Austen also enjoys reading, hiking, and playing dungeons and dragons with his friends. After finishing his undergraduate degree, Austen plans to continue his studies for a PhD in applied physics, with a focus on creating more efficient and environmentally friendly energy sources. He currently does research at the University of Texas at Dallas with organic LEDs and semi-conductors, while also working as a Peer Advisor for on-campus residents to help them navigate their own college plans.

Candidate Statement: If elected, Austen hopes to create more collaborative events throughout zone 13 and its neighbors. This includes small scale programs between nearby institutions, and the occasional larger event or meet-ups throughout the zone. Austen believes that focusing interaction between SPS chapters, outreach to potential incoming physics students, and an increase in the local excitement for physics. This is both to engage our SPS chapters with a greater sense of community, and to look to the future of physics students, ensuring that they will be motivated, engaged, and adequately prepared for their later careers and/or academic pursuits. Austen thinks that the students of SPS are the backbone of SPS, and that this focus will create the best environment for official SPS members, physics students, and those simply interested in the world of physics.

Zone: Zone-13

Position: Associate Zone Councilor (AZC)

Name: Wade E. Cookston

Chapter: Texas Lutheran University

Biography: Wade Cookston is a junior in the Texas Lutheran University Department of Physics, pursuing a degree in Applied Physics. Wade has been an active participant in the TLU Chapter of SPS since his freshman year, and has been on the leadership team for the group for the past two years. Wade helps plan and carry out weekly meetings of the TLU SPS and he has been involved in multiple outreach and service activities with the group, including Family Physics Night, an annual community outreach event that attracts over 400 people to the small campus at TLU. Wade is also an athlete, which at TLU is not uncommon even for physics majors. Wade also serves as one of the Junior Class Representatives on the TLU Student Government Association, providing the unique perspective offered by someone heavily involved in STEM. Wade has attended and presented at several Joint Texas Physics meetings, where SPS Zone 13 meets with the Texas Sections of the APS and AAPT. Wade intends to pursue graduate school after completing his physics degree, but is not sure yet exactly what he will study, since he is interested

in so many interesting things about physics! His most recent interests include the topics he is learning in his first formal Quantum course.

Candidate Statement: If elected as the Associate Zone Council for Zone 13, one of the first things that will be on my agenda will be to get as many Texas chapters as possible to make the trek to the upcoming PhysCON2019. I am looking forward to being a part of this historical meeting. I have heard from my peers who attended the gathering in 2016 what a life changing experience that was, and hope to make sure that Zone 13 is well represented in Rhode Island. In addition, I hope to continue to ramp up the communication efforts so that all the chapters in the state are connected and informed about the many opportunities made possible by membership with SPS. My involvement in SPS had been pivotal in my success thus far in pursuing my physics degree, and I intend to spread that message and promote growth in statewide membership!

Zone: Zone-13

Position: Associate Zone Councilor (AZC)

Name: Roy Salinas

Chapter: Abilene Christian University

Biography: I am currently a junior Physics major with minors in computer science and mathematics. I have gone to Fermi National Accelerator Laboratory for the past two summers and am currently helping with the STAR forward upgrade at Brookhaven National Lab. I am the current president for our SPS chapter and enjoy every bit of it.

Candidate Statement: I plan to begin improvements regarding the communication between chapters in Texas and create a better strategy to incentivize SPS outreach to communities about how great science is. I also plan to take suggestions from each chapter to hear what they need and create a plan to address those needs. There is a lot that can be done and if elected I plan to begin facing our needs as a zone.

Zone: Zone-14

Position: Associate Zone Councilor (AZC)

Name: Keegan Karbach

Chapter: Metropolitan State University of Denver

Biography: Keegan was born with a passion for a general understanding of the physical properties underpinning the universe. Coming into contact with the study of physics and calculus in high school cemented his desire to become a research physicist, specifically in the field of fusion power. During his undergraduate career, he has paved his own path, taking many independent study courses to further his understanding of the physics of fluids and plasmas. Aside from his rich academic background, Keegan has participated as a member and officer of SPS since his second semester of undergraduate study, filling the positions of secretary, treasurer, and president; the latter for two full terms. His chapter has won both the Outstanding Chapter award and the Distinguished Chapter award for its outreach and student engagement activities. He is a member of Sigma Pi Sigma, a founding member of Physics Student Innovators and Alumni, and a member of the Physics for Humans project. Keegan is also employed by his department as an assistant lab coordinator and tutor, as well as a student instructor for the mathematics department.

Candidate Statement: As a president of my SPS chapter, I've focused on the impact of our organization two-fold: both to our school's population of physics students and the impact that SPS can have on the population of primary and secondary students in the greater Denver area. Moving forward, I have focused on continuity; SPS has had an amazing impact on my life as an undergraduate student and I want that to continue after I've graduated. To that end, I want to move into the Associate Zone Councilor role to foster a sense of continuity as well: continuity both in our community vision as a zone and continuity of the strategic vision of SPS as a national organization. We can provide a welcoming community to all of our fellow cohort of physics students and alumni, we can serve our respective communities in terms of outreach, we can build our mutual connections as a zone and foster fellowship between our respective universities.

Zone: Zone-15

Position: Associate Zone Councilor (AZC)

Name: Jared Coles

Chapter: University of Utah

Biography: Jared is a first-generation college student about to complete his third year of studying applied physics at the University of Utah. He does research in high-pressure condensed matter with Dr. Shanti Deemyad, and loves doing outreach events and lab tours with the University's SPS group. As president of his SPS chapter, he has further expanded the relationship between the physics department and local scouts, schools, and the university community.

Candidate Statement: As Associate Zone Councilor, Jared will work towards reconnecting the many chapters of our zone. Between universities with active programs, inactive chapters and those looking to start their own, Jared will work hard to increase communications and resource flow between institutions. Jared will work hard to establish a network of interactivity that highlights initiatives and success on a regional level, making space for a community of chapters that can grow together.

Zone: Zone-15

Position: Associate Zone Councilor (AZC)

Name: Tensor Elmikawy

Chapter: Brigham Young University - Idaho

Biography: Tensor Elmikawy was born to a Cuban mother and Egyptian father near the western shores of South Africa. He grew up in both Scotland and Germany and consequently speaks English and German fluently, with knowledge of 8 other languages. He started exploring nature as a young boy. He grew up in sometimes unstable circumstances, in which he found refuge contemplating existential questions humans have been asking. He has traveled the world, living and working in Hong Kong, then working as a rappelling/climbing instructor at a US airbase in Germany before finally coming to the United States to study physics.

Candidate Statement: Tensor would like to participate in the SPS National Council and use his unique perspective to contribute to the physics community.

Zone: Zone-15

Position: Associate Zone Councilor (AZC)

Name: Brenne Wilcox

Chapter: Utah State University

Biography: Brenne Wilcox is a junior in the physics teaching program at Utah State University. Brenne will graduate in the spring of 2021 with a B.S in physics education and two minors in English and art. She will then continue her education and get a master in science education to become proficient in teaching STEAM in the classroom. Brenne is currently working on writing STEM curriculum centered around

amusements parks for Utah States Physics Day and the teachers from across Utah and other States that attend.

Brenne has only been in SPS for 2 years, but has been heavily involved during them having served as an outreach coordinator for this current year. My volunteer work has included monthly outreach activities with the community, reaching out and helping with science nights at local elementary schools. I also have helped with PhysX, an overnight workshop for high school girls on our campus.

Candidate Statement: If elected I hope to foster an environment that allows more communication between zones and create an atmosphere that ideas can be shared between zones and chapters. I also hope to create a stronger aspiration for outreach to the community, as to help influence future scientist and to help show the great work SPS is doing. I also believe by creating a strong relationship between zones and the community we can activate more chapters within the zones, which I hope to do as well.

Zone: Zone-16

Position: Associate Zone Councilor (AZC)

Name: Autumn Durham

Chapter: University of New Mexico society of physics students

Biography: Second year physics major chem minor. Willing to work hard for the chapter and zone.

Candidate Statement: Work with surrounding states in my zone as well as the zones around us to provide the best experience for my fellow SPS members.

Zone: Zone-17

Position: Associate Zone Councilor (AZC)

Name: Kourtney Adkisson

Chapter: Central Washington University

Biography: Kourtney Adkisson is currently a junior in the physics major and honors college at Central Washington University. She hopes to continue on to study acoustics as well as aerospace engineering. In the Society of Physics Students, she has served as Central's president for the 2018-19 school year and as their senator for the 2017-18 school year. She also participates in the campus astronomy club as secretary and is involved in many physics department events. Included in her experience is many outreach experiences such as STEM nights held throughout Washington State for elementary schools, middle schools, and high schools. In addition to this, Kourtney has mentored at physics summer camps and participated in conferences such as the Conference for Undergraduate Women in Physics.

Candidate Statement: Kourtney will continue to encourage individuals to stay involved in the Society of Physics Students within their communities through effective communication between each of the different chapters. She will work to continue to present organized information to chapter officers as well as encourage chapters to connect with one another.

Zone: Zone-17

Position: Associate Zone Councilor (AZC)

Name: James Bensen

Chapter: University of Washington Bothell

Biography: Born in Long Island NY, my interest in physics began where I took my first physics course, St. Anthony's High School. After graduation I attended Colorado Mesa University where I received a scholarship to play DII Men's Soccer. Through this experience I learned a lot about leadership and how to work with a team to accomplish a common goal. Wanting to allocate more of my time on pursuing a higher education, I transferred to University of Washington Bothell where I discovered a profound passion for physics. Through all the opportunities provided, I got involved with research in quantum field theory as well as hydrogen energy storage. Fortunately, the University of Washington has a collaboration with LIGO so I've been able to learn a great deal about gravitational waves and was even given the opportunity to teach high school classes about gravitational waves and how they are detected. Perhaps the greatest interest of mine lies in the different interpretations of quantum mechanics and their implications on the nature of reality.

Candidate Statement: If elected, I look forward to taking on the responsibility that comes along with being an Associate Zone Councilor. The opportunity to represent my zone as well as build a network would be an honor. I plan on promoting science to the public and doing my best to foster a welcoming atmosphere for all.

Zone: Zone-18

Position: Associate Zone Councilor (AZC)

Name: Cody Fischer

Chapter: Sacramento State University

Biography: New transfer student to CSU Sacramento, with 4.0 physics related GPA at community college, and 3.604 overall GPA. Major is Physics with Teaching concentration. Was a part of Academic Decathlon in senior year of high school to gain extra education in science, speech presentation, and leadership skills.

Has held many (5) different tutoring jobs (private and group), some simultaneously, ranging from middle school to college math and physics. Occasionally did volunteer group tutoring as well at community college.

Candidate Statement: As a student of the college where the next Zone meeting will be held, I have a home field advantage when it comes to being able to organize everything that a Zone meeting entails. By that, I mean I have direct contact with all the SPS members here, whose help will be invaluable for setting up everything in the meeting hall. Additionally, preparing a tour of our planetarium will be a priority, and since it is on our campus, that will be easier for me to contact those in charge of it to set that up. As far as past experience goes, I have organized a mentionable amount of smaller events before, so I plan to use the experience I gained from those and put it to the large scale to make sure the meeting is a success.

Zone: Zone-18

Position: Associate Zone Councilor (AZC)

Name: Shubham Kumar

Chapter: Institute of Engineering and Management, Kolkata, India

Biography: The nominee has completed senior secondary education and is currently pursuing B. Tech in Electronics and Communication Engineering. He is currently in 1st year, 2nd Semester. He has done Volunteering in many events held in the college, names of which are INNOVACIÃ-2019,TECHFEST OF IEM KOLKATA, IEM-UEM KOLKATA MARATHON 2019, IEMPACT-CULTURAL FEST OF IEM, KOLKATA MINI MAKER FAIRE, 2018. He is the person never giving up and work dedicatedly for anything. He never loses his focus for a work.

Candidate Statement: Since, I am nominating myself, so here are my plans. Having zone meetings for different chapters, attending zone meetings hosted by others, and keeping a polite thumb in the back of chapter officers.

I will also try to host meetings for latest research on physics using video conference as well as face to face meeting.

Zone: Zone-18

Position: Associate Zone Councilor (AZC)

Name: Cynthia Olvera Perez

Chapter: California State University-Chico

Biography: My name is Cynthia Olvera Perez, I have been an active SPS member since the beginning of my educational career studying physics in California State University, Chico. I grew up in southern California where I developed an interest in astronomy when my first-grade teacher taught my class about Mae Jemison, the first African American female astronaut. As a little child I remember pondering about where the “edge of land” was, what one saw when they looked over the edge. I then learned that the place, we walk upon is a sphere, a planet. I believe my curiosity and love for the universe has guided me to continue my education and during the summer of 2018 I dedicated my time studying magnetic spots on sun like stars using a 3D stellar convection magnetohydrodynamic simulation, where I tracked and located about 200 magnetic loops. My computational work allowed me to study and develop an understanding about sunspots, how they are formed and what their motion appears like. My dedication and experience helped me land the opportunity to spend the summer in New York studying the properties of galaxies in voids this up coming summer as a part of CAMPARE. In the future, I hope to attend grad school and obtain a PhD in astrophysics. Despite the struggles I have faced in the past I continue to strive for success, keeping in mind what is most important for me, where I want to be, where I need to be and reminding myself of who I wanted to be when I was in first grade, “like Mae Jemison” I said.

I lead problem solving sessions and tutor lower division students struggling in physics, I love to share my passion and help others understand the beauty that is physics. In the past I have helped grade papers for my professors, and mentor first time freshmen students who are majoring in STEM. I have previously attended CUWiP in 2015 and 2016 as well as had the opportunity to present my research poster in the APS far west meeting in Fullerton, CA in 2018. I am part of the WiP, Women in Physics club in Chico State, a safe place for all women in the physics department. Outside of academics when I get the time, I enjoy playing video games, writing poetry and stargazing at the local observatory in Chico which is among my favorite places.

Candidate Statement: As the Associate Zone Councilor I would love the opportunity to be a part of the planning behind our conferences. I want to represent my chapter during my last year as an undergraduate, and be the voice for the physics community.