



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: William "Sandy" Karstens

Chapter: St. Michael's - Vermont

Biography: William Karstens is a professor of physics at Saint Michael's College in Colchester, Vermont, where he has also served as department Chair. He received his B.S. and Ph.D. from the University of Vermont and his Masters degree from Brandeis University. His research is in condensed matter physics, with a focus on optical properties of solids. William has been the SPS Chapter Advisor since the college first gained recognition in 2014. He is also the Secretary and Past President of the Vermont Chapter of Sigma Xi, the Scientific Research Society.

Candidate Statement: I have significant experience with chapter-driven organizations, especially those with a focus on undergraduates. Among my goals therefore, will be to maintain a high level of communication with the chapters, promote the programs from National, assist the chapters to the best of my ability, and in general, be an advocate for our future scientists and leaders.

Zone: 3

Name: Roberto C. Ramos, Ph.D.

Chapter: University of the Sciences

Biography: Professor Roberto C. Ramos is an experimental quantum mechanic and ultra-low temperature physicist who probes the quantum properties of materials and devices. He has published in top scientific journals including Science, Nature Communications, Physical Review, and Journal of Applied Physics. He has been awarded over \$1.3M in research and education grants from the National Science Foundation and DOE research equipment valued at over \$700,000. He was Program Director of two NSF S-STEM Scholarship Programs, at Drexel University and Indiana Wesleyan University, where he was Blanchard Endowed Research Chair, a Hinds Fellow, and two-time Principium Lecture Awardee. He received Drexel University's Allan-Rothwarf Award for Excellence in Teaching and the Bright Idea Award at USciences. He has advised and nurtured award-winning chapters of the Society of Physics Students across three universities, was nominated twice as Outstanding SPS Advisor, and most recently been the faculty advisor to the University of the Sciences' Chapter of the Society of Physics Students. Dr. Ramos further serves as Director of USciences Center for Undergraduate Research. He is an advocate of "women in STEM" and has organized four "Physics Wonder Girls Camp" for middle school girls, featured by Philadelphia's ABC News Network on their Nightly News.

Candidate Statement: Dr. Ramos is a very committed and enthusiastic Society of Physics Students faculty advisor. Throughout his entire career as a physics professor, he has served as the SPS advisor for three different SPS Chapters at Drexel University, Indiana Wesleyan University, and most recently at the University of the Sciences in Philadelphia, PA. All of these three SPS Chapters were under his advisory and mentorship nationally recognized as Outstanding Chapters by the SPS National Council. Dr. Ramos has always made it a high priority in his professional career to engage and encourage the members of his local SPS Chapters. He further worked with them on various physics and science outreach programs within the various university communities and further with outside neighbor communities. His various

physics outreach efforts with his local SPS Chapter members have been recognize by the SPS National Council with various awards and have further been showcases on local TV. Dr. Ramos would bring as the Zone Councilor for Zone 3 a tremendous amount of enthusiasm, energy, and most importantly new ideas. He would serve as an ideal ambassador of Zone 3 on the Society of Physics Students' National Council. His experience as a successful SPS Chapter Advisor would be a great asset on the Council and in the various activities happening in Zone 3. There is no doubt that Dr. Ramos is the best choice to serve as Zone Councilor for Zone 3, he is well prepared for the position's responsibilities, enthusiastic about promoting SPS and Zone 3, and most importantly a wonderful advocate for the study of physics. Dr. Roberto C. Ramos is the absolute best choice to serve as the Zone Councilor for Zone 3.

Zone: 4

Name: Donna Hammer

Chapter: University of Maryland

Biography: Donna Hammer, M.Ed, is the Director of Education in the Department of Physics at the University of Maryland. She has served as the SPS chapter advisor for four years. Last spring, she was awarded the university-wide Outstanding Advisor for a Student Organization Award for her work with SPS. She is dedicated to student success. Hammer leads admissions and advising, instructional labs, and the lecture demonstration facility; outreach and public engagement; and diversity and inclusion initiatives and programs. Last fall, she co-led the first Conference for Undergraduate Underrepresented Minorities in Physics (CU2MIP) with NIST, which will be held again in October, 2017. She is also an instructor and a lead on the department's NSF S-STEM program.

Candidate Statement: As the Chapter Advisor of the University of Maryland SPS Chapter, I have worked closely with the officers and members to promote an open and engaging physics community for our students. I believe that as part of an organization dedicated to undergraduate success, the job of an advisor, or Zone Councilor, is to provide any necessary tools, resources, and support in order to enable students to ensure their own success. Over the past four years, active membership in our chapter has increased to over 50 students through building a strong network and community in the Physics Department at UMD. As Zone 4 Councilor I will work to increase meaningful activities and encourage networking across our institutions. By working more closely with the SPS national office and the broader SPS community, I hope to learn how to best help our SPS chapters have a strong footing in what is going on in the field nationally and share best practices. I hope to keep our Zone connected and aware of all opportunities and updates that will help strengthen each chapter, and provide direction and support for the future of every student.

Zone: 4

Name: Will Roach

Chapter: Lynchburg College

Biography: Will Roach attended Virginia Commonwealth University where he earned a B.S. in Electrical Engineering. He then continued his studies at the College of William and Mary where he earned a Ph.D. in Applied Science. During graduate school, his research focused on superconducting thin films for

particle accelerator applications. Since 2013, he has been an assistant professor in the physics department at Lynchburg College. He is actively involved in student research projects including optical measurement of magnetic properties, development of an automated chromatography instrument, and robotics. He currently serves as the faculty advisor for Sigma Pi Sigma and the Society of Physics students at Lynchburg College. His favorite part of being a college professor is interacting with students and watching them have those “Aha!” moments. He is always striving to improve his teaching methods by attending workshops and seminars on physics pedagogy. In his free time, he enjoys spending time with his family, visiting museums, and learning card tricks.

Candidate Statement: If elected Zone Councilor, I plan on improving communication between chapters located in the same zone. We often fall into the trap of living in our own little comfort zone and not branching out. I would like to initiate a dialogue between all chapters in the zone where resources and ideas can be shared easily. The Society of Physics Students is a great resource to help schools recruit and retain students. By sharing what works and what doesn't, we will be able to strengthen our departments and the physics community as a whole. In addition to improving communication between chapters, I want to ensure that all chapters are aware of the resources (e.g. financial, technical, or connections) available from the national organization. Since the primary focus of the organization is the students, I want to make sure that their voice is heard and that we are allowing them to make SPS what they want it to be. For this, I will rely heavily on the Associate Zone Councilor to act as the voice of the students for our zone. I look forward to serving the zone to the best of my ability to help foster the next generation of physicists.

Zone: 4

Name: Gregory Topasna

Chapter: Virginia Military Institute

Biography: I have previously served as the Zone 4 councilor and I am the current chapter advisor at VMI of SPS and Sigma Pi Sigma. I received my Ph.D. from VA Tech in 1999 and since 2000 I have been a faculty member in the Department of Physics and Astronomy at Virginia Military Institute. I am currently the Director of VMI Observatory. Over the years I have worked with a number of students on research projects in the area of thin films and observational astronomy. These students have gone on to present their research at Zone meetings, the Virginia Academy of Science's Annual Meeting, and the Sigma Pi Sigma Quadrennial Congress.

Candidate Statement: If elected I will work with the Associate Zone Councilor to implement the programs and enforce the established guidelines of the governing body of the Society of Physics Students. As a previous Zone Councilor I attended the annual meeting and participated in the program (helping to implement the agenda and action items that were drawn up during the annual meeting), helped during the Sigma Pi Sigma Congress, and stayed in contact with the schools in my zone. If elected I will work as hard now as I did in the past.

Zone: 8

Name: Dan Miller

Chapter: Millikin University

Biography: Miller is Professor of Mathematics and Director of the Requarth Observatory at Millikin University. The observatory holds the largest university operated telescope in Illinois and with the support of the SPS chapter, the observatory is open to the public every Wednesday night of the academic year. Dr. Miller routinely teaches travel course focusing on astronomy and ancient cultures and supervises undergraduate research in astro-photography.

Candidate Statement: I have enjoyed completing my first year as the zone 8 councilor and am looking forward to becoming more involved with the chapters and supporting their outreach programs.

Zone: 9

Name: Cecelia Vogel

Chapter: Augustana College

Biography: Cecilia Vogel obtained a PhD in nuclear physics from the University of Minnesota. Since then, she has taught at Augustana College, emphasizing effective teaching and undergraduate research. Augustana's SPS chapter has won numerous awards over the 20 years she has been its adviser. She encourages collegiality, leadership, and outreach among chapter members.

Candidate Statement: I plan to encourage the Zone's SPS Chapters to be involved in Zone Meetings, PhysCon, and research conferences, in addition to local activities. I will raise awareness of these SPS meetings and other timely events such as Pi Day and the 2017 solar eclipse, so that our Zone chapters can benefit from these experiences. I will bring good communication and enthusiasm to the position of Zone 9 Councilor.

Zone: 13

Name: John Wilson

Chapter: Sam Houston State University

Biography: Dr. Wilson serves as the Sam Houston State University adviser. He has significant experience in management and outreach and would make a strong addition to the SPS National Council. He led educational outreach for the University of Houston physics department for a number of years and successfully organize monthly meetings with high school physics students and teachers and built participation to 150-200 students and teachers. Dr. Wilson recently reorganized Sam Houston State University SPS and enrolled almost thirty new SPS members February 10, 2017. Reorganization included election of officers, initial plans for SPS community involvement, and reinstatement of Sigma Pi Sigma.

Candidate Statement: I, John Wilson, will actively serve on both the local/regional and national SPS when elected as the Z-13 Councilor. My experience and leadership skills will assist SPS nationally.

Zone: 14

Name: Hannah Jang-Condell

Chapter: Wyoming Chapter of the Society of Physics Students

Biography: Dr. Jang-Condell received her BS in Physics from MIT, where she was inducted into Sigma Pi Sigma. She received a PhD in Astronomy from Harvard University in 2004. She went on to become a Carnegie Fellow at the Carnegie Institution for Science in the Department of Terrestrial Magnetism, a Michelson Fellow at the University of Maryland and NASA Goddard Space Flight Center, and a fellow at the Space Telescope Science Institute. She has been on the faculty at the University of Wyoming in the Physics & Astronomy department since 2011, and faculty advisor to SPS since 2014. Dr. Jang-Condell served on the American Astronomical Society's Committee on the Status of Women in Astronomy (CSWA) from 2006-2012, and founded the Women in Astronomy Blog.

Candidate Statement: I love physics, and I love fostering that joy in the undergraduates I work with in SPS, as well as in public outreach efforts I carry out at the K-12 level. As a Zone Councilor for SPS, I would like to broaden efforts to reach out to more students and make physics as a discipline more welcoming to diverse students, whether it be with regard to gender, race, ethnicity, sexual orientation, religion, disability or any other human characteristic unrelated to ability to understand physics. From serving on the CSWA, I learned a lot about how to make physics and astronomy more approachable to women and minorities, and I plan to apply those lessons to a leadership position within SPS.