

TOP STORY: SIGMA PI SIGMA INDUCTION



A typical $\Sigma\Pi\Sigma$ Induction ceremony is a wonderful occasion for recognition of academic achievements of the top of a graduating physics class. However, it should be remembered that $\Sigma\Pi\Sigma$ exists not only to honor outstanding scholarship in physics, but also to encourage interest in physics at all levels as well as to promote service, and to provide a fellowship of persons who have excelled in physics. With this in mind it is only logical for a school like CSU, whose $\Sigma\Pi\Sigma$ chapter was dormant for almost 46 years, to expand its $\Sigma\Pi\Sigma$ chapter membership by inducting alumni who have significantly contributed to a physics department, to physics

scholarship, to physics fellowship, to physics general outreach and service. This approach has been taken by our chapter of $\Sigma\Pi\Sigma$ since it's resurrection in 2018 following $\Sigma\Pi\Sigma$ Chapter Project Award. Every year we try to induct the very top of the physics class and alumni from recent and not-that recent years. We have a strong belief that this approach helps to build the bridges between our department, current students, and alumni from different walks of life who either have established themselves already or are on an exciting career trajectory. Different generations of alumni in multitude of professions, current and emeritus faculty, and students assembled together at the induction might not know each other well or at all, but they all have a common bond in our physics department. This bond creates an amazing synergy and atmosphere in the room not only provokes the exchange of ideas, solicitation for an advice, many laughs and jokes, but also leads to real job opportunities for current students and to service and fellowship opportunities for the alumni. This synergy created at an induction event with alumni in strengthens the department.

The 2022 $\Sigma\Pi\Sigma$ induction ceremony took place on Friday, May 13, in the marvelous art-deco Panel Room of the Fenn Tower. It brought together more than 60 guests (students, faculty, alumni, and administration) for an evening of celebration of this year's physics awards, a physics faculty retirement, recognition of four honorary alumni who contributed heavily towards Physics Congress (PhysCon 2022), and an induction of eight new $\Sigma\Pi\Sigma$ members, followed by an Italian buffet dinner.

The evening started with a reception during which guest had a chance to meet each other as well as CSU faculty students, explore a collection of several poster about SPS, Physics Department, CSU's REU and about 20 Physics Day posters that highlighted yearly departmental outreach event for middle and high school students. The opening remarks by Dr. Streletzky, (Dr. S) started the official portion of the evening. After welcoming the guests, Dr. S briefly talked about the threats to small physics programs around the country and thanked alumni for their help in latest round of fight for the independent physics department. He then talked about national SPS and history of the CSU's SPS chapter showing pictures of the chapter leadership from more than 52 years.

Then Patrick (President-elect) and Jordan (treasurer) with some help from Dr. S discussed the state of CSU's SPS chapter and what SPS has been up to for the past year (Olympics, Jeopardy, other SPS events, and student conference travel) with a special focus on their recent "Physics Fridays" outreach done at Bio-Med Science Academy. Student expressed a hope to not only continue their outreach

efforts over the next year but to expand the joy of physics to as many kids as possible! Dr. S also highlighted the 11-year history of the “Physics Fridays” outreach program of our chapter which was led through the years by several of the to-be-inductees and honorary guests. This part was concluded with Dr. S reviewing the achievements of our SPS chapter under the leaderships of the last two SPS presidents (Sam Tietjen and Andrew Scherer - both of whom were to be inducted).

In the next part of the ceremony, Dr. Fodor, the chair of the physics department, highlighted the state of the program and some of the recent achievements of the department itself. The highlights included faculty promotions and a faculty hire, faculty awards, recognition of Dr. S being elected as the president of the National Society of Physics Students, publications with undergraduate students, mentioning of student admittances to REU and grad schools, and student awards, including the Outstanding Physics Senior award and university-wide recognitions (Valedictorian). Dr. Fodor concluded his part by thanking alumni, who made the physics department the leader among all academic department of both money raised and number of donors on CSU’s 2022 giving day. This portion of the evening was followed by recognizing alumni-honorary guests (Mr. Gunder’17, Mr. McDermott’15’17, Dr. Freeman’11, and Dr. Glaser’14) who already made significant contributions towards PhysCon 2022.

Following Dr. Fodor’s presentation, Dr. S talked in detail about the mission, the history, and four pillars of ΣΠΣ, highlighting the Physics Congress (PhysCon) as one of the key ΣΠΣ programs. Andrew Scherer (outgoing SPS president) then talked about his life-changing experience of attending PhysCon 2019 that led to his interest in Physical Oceanography. He was followed by a group of current SPS officers (Jacob Forester, George Tomaras, Collin Douglas, Jordan Miller, and Patrick Herron) in describing speakers, tours, workshops, seminars of the PhysCon 2022 conference that they were very excited about. The students who presented already inspired other undergraduates to register for the conference as well! A wonderful evening of fellowship and presentations was concluded with the induction ceremony itself. Dr. S went over the 53-year history of CSU’s ΣΠΣ chapter, its recent inductions, and the meaning of ΣΠΣ insignia and the red book as well as the responsibilities of the inductees. Then each of the eight new ΣΠΣ members was introduced by either another CSU alum or Dr.S, inviting them to sign the CSU red book one by one. Each inductee was gifted a pin, a pen, and a membership card that signifies their becoming of a lifetime member of ΣΠΣ. Then the words of the Charge to New Members were read by Dr. Jearl Walker to the entire group. The 2022 inductees included: Dr. James Lock (CSU’s physics professor emeritus), Tara Peppard '05 (CSU’s physics lab manager), Janna Mino '15 (STEM Education Specialist in Ohio Dept of Education), Marie Blatnik '15 (PhD candidate in physics at CALTECH), Robert White '15 (Physics Instructor at CSU), Samantha Tietjen '20 (Barn manager and instructor), Angela Noreck '21 (PhD physics student at CWRU), Andrew Scherer '22 (PhD oceanography student at Oregon State).

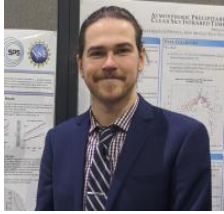


The induction ceremony was closed by honoring Dr. Miron Kaufman’s retirement and celebrating his 36 years (and counting) at Cleveland State University and 12 years as a chair of the Physics Department. Happy Retirement Dr. Kaufman!

The guests were then invited for a group pictures and served an Italian buffet dinner which stimulated many conversations and networking between students, alumni, and faculty.



STUDENTS: A. SCHERER NAMED COLLEGE OUTSTANDING SENIOR AND PHYSICS OUTSTANDING SENIOR; RECEIVED UNDERGRADUATE PHYSICS TEACHING ASSISTANT AWARD



Sincere congratulations to Andrew Scherer (BS Physics Honors and BS Environmental Science '22) who was recognized as 2022 College of Sciences and Health Professions Outstanding Senior for his outstanding academic achievements. Andrew was also named 2022 Physics Outstanding Senior, the honor that recognizes not only outstanding academics, but also significant research achievements presented at CSU and nationally, and tangible service contributions to the department, SPS, and physics outreach to general public. In addition, Andrew received 2022 Undergraduate Physics Teaching Award for his work as teaching assistants for our introductory undergraduate teaching laboratories.

Andrew has been involved with CSU chapter of SPS for years as a treasurer, outreach coordinator, and president, organizing local events such as Physics Olympics, Jeopardy, and outreach events at local schools. He also was a part of CSU delegation SPS to the PhysCon 2019 in Providence RI. In addition, Andrew has been a dedicated undergraduate researcher both in Streletzky's lab and in the Ocean Sciences REU program at California State University, Monterey Bay. He will be pursuing a PhD in Physical Oceanography at Oregon State University in Corvallis, OR, starting in the fall 22.

NATIONAL NEWS: CSU CHAPTER HIGHLIGHTED IN THE SPS OBSERVER



Our CSU chapter of SPS was featured in the most recent SPS Observer (Spring 2022 issue)! Sam Tietjen (BS Physics Honors' 20, MS Physics' 21) and Andrew Scherer's (BS Physics Honors' 22) article highlights one of the creative opportunities that the pandemic has provided. During this challenging time, the mask designed by Samantha and Andrew allowed chapter members to show off their SPS spirit (including CSU SPS logo drawn by Sam herself) and remain compliant with the universities and CDC Covid-19 safety guidelines! You can read the full article at <https://www.spsnational.org/the-sps-observer/winter/2022/pandemic-brings-unique-spirit-wear-opportunity>

REGIONAL NEWS: SPS OUTREACH TO BIO-MED ACADEMY, ROOTSTOWN OH



On February 11, Physics Fridays outreach group of the CSU's chapter of the Society of Physics Students (SPS) visited the Bio-Med Academy in Rootstown, Ohio, where Janna Mino (BA Physics '15) the former coordinator of the Physics Fridays and SPS vice president taught physics last year. This trip was a part of the chapter's Fabulous Light Waves middle/high school outreach program supported through the SPS 2022 Marsh White Award. Several SPS officers (Andrew Scherer, Patrick Herron and Jordan Miller) together with Physics Fridays co-founder and CSU alum Jim Pitchford and SPS advisor Dr. Streletzky brought demonstrations on the physics of sound and light to more than 100 seventh graders from BioMed Academy. The students learned about the wave nature of sound and light during the lesson introduction and got hands-on small group interactive experience with a wide variety of the light phenomena including diffraction, dispersion, polarization, refraction, reflection, and a model of the human eye! The day ended with an open question and answer session where the kids got a chance to ask their burning questions on faster than light travel, quantum physics, and the color of the sky (at least some of them had to do with light waves!).

LOCAL NEWS: PHYSIC DAY 2022



On April 1, 2022, The Physics department continued the tradition of Physic Day! Students from the Bio-Med Science Academy visited CSU campus to hear from faculty and current students about pursuing degrees in physics. Dr. Fodor and Dr. Streletzky talked about the programs offered here at Cleveland State as well as the Society of Physics Students, several of who assisted throughout the event with special demonstrations! The visitors then toured the research labs, hearing from the professors and their student research assistants. Dr. Bickel and Jacob Martin showed the microscopic view of an everyday item, a graphite pencil, zooming in to eventually see the individual carbon atoms! Dr. Fodor and our Electronics Technician Miroslav Bogdanovski demonstrated our SEM lab, showing off the highly specialized equipment that CSU has to offer prospective students and researchers alike.



Dr. Streletzky with the help from SPS Outreach coordinators Patrick Herron and CSU Alum James Pitchford presented various optics and laser demonstrations in our own Optics/Modern Physics Lab! After the tour of the facilities, our Lab Manager, Tara Peppard went through fifteen classical Physics Days hands on demonstrations for the BioMed students and their teachers with some help from our Graduate Assistants and SPS members. The day was ended with lunch for our guests from the Bio-Med Academy, and of course included our departments signature dessert and demonstration by SPS officers and Dr. Streletzky: Liquid Nitrogen Ice Cream!!



Special thanks to the organizer Lab Manager, Tara Pryor, and the volunteers that made this possible: Graduate Assistants, Geoffrey M Nyabere, Ali Dibeh, Angelicah M Nyanchoka. SPS Members, Patrick Herron, Jordan Miller, Andrew Scherer.



STUDENT/RECENT ALUMNI ANNOUNCEMENTS

Andrew Scherer'22 became PhD Student in Physical Oceanography at Oregon State University

Angela Noreck'21 became PhD Student in Physics at Case Western Reserve University

Alexis Merk'22 became PhD Student in Oceanography at University of Maine

Patrick Herron has received 2022 *Peggy Dixon Scholarship* through the national SPS

CSU SPS Chapter 2022 elections: President - Patrick Herron, VP - George Tomaras, Treasurer - Jordan Miller (reelected), Secretary - Collin Douglas, Historian - Jacob Forester

Special Thanks to *outgoing* SPS officers: President - *Andrew Scherer*, VP - *Richard Sent*, Treasurer - Jordan Miller, Secretary - Patrick Herron, Historian - *Drace Adams*, Outreach team - *Jatin Patel*

ALUMNI NEWS

Mr. Christian Gunder'17 secured a position of Fermentation Engineer at Envirozyme, Bowling Green OH

Mr. Ryan McDermott'15 '17 became Medical Physicist at the Bon Secours Mercy Health, Youngstown OH

Dr. Krista Freeman'11 became a co-first author on a paper in *Nature Medicine* 27, pp 1357-1361 (2021)

FACULTY/STAFF ANNOUNCEMENTS

Dr. Bickel was awarded with the 2022 Jearl Walker Outstanding Teaching Award

Dr. Resnick was awarded with the 2021 COSHP Outstanding Research Award

Dr. Streletzky got elected as the President of the National Society of Physics Students (2021-2023)

Mr. Joseph Reddaway joined the Department as Administrative Coordinator

CONTACT US!

Have something you'd like to share? Send an email to physics.dept@csuohio.edu or call the number below! Thank you for supporting the CSU Physics Department!

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