



SIGMA PI SIGMA

The physics honor society

Sigma Pi Sigma Chapter Project Award Final Report

Project Title	An Emphasis on Physicists – Past, Present, and Future
Name of School	Missouri Southern State University, Joplin, MO
Sigma Pi Sigma Chapter Number	564
Total Amount Awarded	\$500.00
Project Leader	Toby Pederson

Summary of Award Activity

Missouri Southern State University's chapter of SPS hosted the $\Sigma\pi\Sigma$ induction ceremony and Alumni picnic which brought together our past and present students, members of the honor society, faculty, industry professionals, new inductees and their families. Six members (2 undergrads, 2 alumni and 2 faculty) got inducted to Sigma Pi Sigma in a formal gathering at the university followed by the alumni picnic and lunch at Landreth park. It turned out to be a great day celebrating our newest members of $\Sigma\pi\Sigma$ and catching up with our alumni, family and friends.

Statement of Activity

Overview of Award Activity

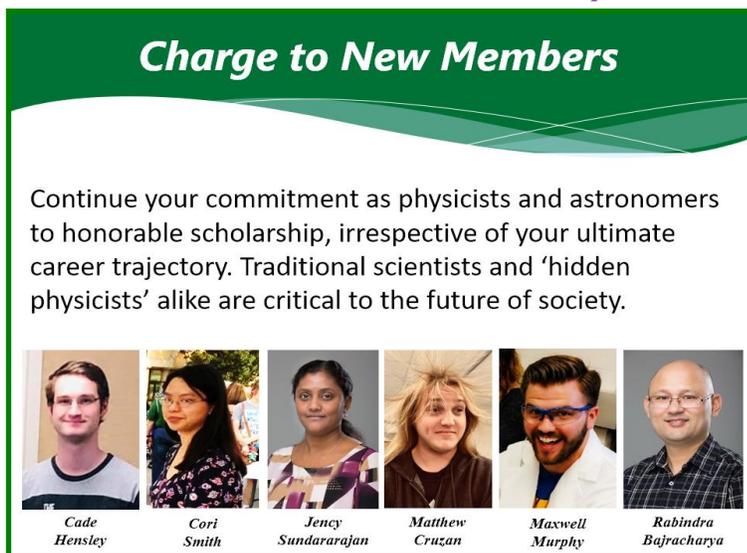
The formal induction ceremony of Sigma Pi Sigma induction was held on April 27, 2019 Saturday at 9:30 am in Reynolds Hall, Missouri Southern State University campus, followed by lunch and Alumni picnic at Landreth Park. This event was made possible by the Sigma Pi Sigma Chapter Project Award 2018-19. Five of the six inductees (Cade Hensley, Cori Smith, Jency Sundararajan, Matthew Cruzan, Maxwell Murphy and Rabindra Bajracharya) were present at the ceremony along with current students, $\Sigma\pi\Sigma$ members, alumni, faculty, family and friends.

$\Sigma\pi\Sigma$ induction:

Toby Pederson, MSSU SPS President & $\Sigma\pi\Sigma$ member, welcomed the audience, talked about the goals of the Society of Physics Students and the importance of Sigma Pi Sigma. We watched a video on the History of $\Sigma\pi\Sigma$. Dr. Jency Sundararajan, MSSU SPS Advisor highlighted the benefits of PhysCon and encouraged everyone to attend the conference in Rhode Island, November 14-16, 2019. We also watched a video on PhysCon 2019. The existence of Sigma Pi Sigma, which is to serve and support the Physics

community in innumerable ways via outreach activities, alumni network, professional contact and collaboration, was explained by Dr. Rabindra Bajracharya.

The symbolism of $\Sigma\pi\Sigma$ key, insignia and the seal was described, and the motto was pronounced and defined by Dr. Shayna Burchett. The presiding officer of the event, Dr. Daniel Marsh shared his experience as a member of $\Sigma\pi\Sigma$, highlighted the responsibilities in joining the distinguished group and invited the new inductees to be inducted into the Physics honor society. Every member followed our traditional 3-step process of igniting the candle displaying a picture of their favorite Physicist, signing the red book, and demonstrating EM induction in order to symbolize their induction into $\Sigma\pi\Sigma$. Toby Pederson led the charge to new members of $\Sigma\pi\Sigma$, congratulated the new inductees and thanked the audience for their graceful presence.



Charge to New Members

Continue your commitment as physicists and astronomers to honorable scholarship, irrespective of your ultimate career trajectory. Traditional scientists and 'hidden physicists' alike are critical to the future of society.

					
<i>Cade Hensley</i>	<i>Cori Smith</i>	<i>Jency Sundararajan</i>	<i>Matthew Cruzan</i>	<i>Maxwell Murphy</i>	<i>Rabindra Bajracharya</i>

Alumni Picnic:

After the induction ceremony, we gathered at the Landreth Park for an informal lunch and alumni picnic. Dr. Marsi Archer, Dean of the College of Arts and Sciences attended the event, joined by all the faculty in the department, students, alumni, local professionals, $\Sigma\pi\Sigma$ members and their families. As mentioned in the proposal, this activity highly benefited the current students as they got to interact with the recent graduates about their experience at current workplace, grad school, research experience etc. It also brought together all the past and present students, enhanced one-on-one interactions as they shared their personal experiences as a student. This gathering motivated the current students and served as an informative session.

Impact Assessment: How the Project/Activity/Event Met the Purpose of the Award

Sigma Pi Sigma induction ceremony and Alumni gathering impacted the local physics community in every powerful way and fulfilled the purpose of the award in all aspects. It served as a great opportunity in bringing together the physics community in the area and celebrating the National Physics Honor Society – Sigma Pi Sigma. The department was supportive in organizing this event and the students were involved in making this gathering a successful event. The ceremony provided an excellent platform for our students to interact with recent graduates about grad school experiences and workplace encounters, make professional contacts, and collaborate with local industry personnel. It was a proud moment for the new inductees and motivating for other students to get inducted to the honor society.

Key Metrics and Reflection

Who was the target audience of your project?	Current undergraduate physics majors, alumni
How many attendees/participants were directly impacted by your project? Please describe them (for example "3 alumni" or "10 physics majors").	40+ attendees (Physics majors and their families, ΣπΣ current and past inductees, Alumni, local professionals, Faculty)
How many students from your Sigma Pi Sigma chapter were involved in the activity, and in what capacity?	4 undergrads with planning, advertising and execution, 2 in induction.
Was the amount of money you received from Sigma Pi Sigma sufficient to carry out the activities outlined in your proposal? Could you have used additional funding? If yes, how much would you have liked and how would the additional funding have augmented your activity?	The amount was sufficient. We could have used additional funding to arrange a formal banquet and cover travel expenses of alumni.
Do you anticipate repeating this project/activity/event in the future, or having a follow-up project/activity/event? If yes, please describe.	Yes. We want to make this an annual event to motivate current students and reinforce contacts with alumni.
What new relationships did you build through this project?	This activity strengthened our contact with alumni and local professionals from the industry
If you were to do your project again, what would you do differently?	We plan on inducting local high school physics teachers next year.

Expenditures

Expenditure Table

Item	Please explain how each expense relates to your project as outlined in your proposal.	Cost
Pastry tray, Fruit tray, Coffee and Juice Bread/Buns, Meat, Vegetables, Grill and Cutlery	As specified in the proposal, the award money was allotted mostly for food expenses	\$430.00
Party and decoration items	Room arrangement and setup	\$30.00
Coffee mugs and gifts	Presented to alumni and inductees	\$100.00
Total of Expenses		\$560.00

Activity Photos



Middle: Toby Pederson, MSSU SPS President and a $\Sigma\pi\Sigma$ member welcoming the audience and talks about SPS and $\Sigma\pi\Sigma$. ***Top Left:*** Dr. Rabindra Bajracharya talks about service opportunities with SPS and community involvement of the local chapter. ***Top Right:*** Dr. Shayna Burchett explains the symbolism of $\Sigma\pi\Sigma$ key, motto, insignia and the seal. ***Bottom Right:*** Dr. Jency Sundararajan, MSSU SPS Advisor highlights the importance and benefits of PhysCon and encourages everyone to attend the conference. ***Bottom Left:*** Dr. Daniel Marsh, Presiding Officer of the induction ceremony emphasizes the importance of $\Sigma\pi\Sigma$ membership and invites new inductees to the honor society.



Left: Electromagnetic induction demo to symbolize $\Sigma\pi\Sigma$ induction.
Right: The table is all set for the induction ceremony.

Our chapter of SPS follows a tradition for $\Sigma\pi\Sigma$ induction. It's a 3-step process in which the inductee first ignites the candle displaying a picture of their favorite Physicist, sign the red book, followed by demonstrating EM induction to symbolize their induction into the honor society.



Cori Smith, an alumnus working as Network Analyst at Leggett & Platt



Jency Sundararajan, Assistant Professor of Physics



Maxwell Murphy, an alumnus working as Engineer at EaglePicher.



Rabindra Bajracharya, Assistant Professor of Physics



Matthew Cruzan, current student



Posing for a casual group picture at the end of the ceremony



Dr. Michael Garoutte, Professor of Chemistry and SPS member enjoys grilling during the Alumni picnic.



Catching up with friends! Current students, alumni and $\Sigma\pi\Sigma$ members.



A good chat with the Dean of Arts and Sciences Dr. Archer (SPS member), Dr. Marsh (SPS and $\Sigma\pi\Sigma$ member), Dr. Burchett (SPS member) and William Yang (SPS and $\Sigma\pi\Sigma$ member).



Jill McDonald ($\Sigma\pi\Sigma$ member), an alumnus pursuing her PhD in Physics and Astronomy at the University of Arkansas shares her experience as a graduate student with the current undergraduates.



A great time at Alumni picnic with faculty, students, alumni and $\Sigma\pi\Sigma$ members.



Its Survey time!!