## St. John's University ΣΠΣ Chapter Induction Ceremony



St. John's University students, local high school students, alumni, and faculty were displaying their egg packages during the egg drop contest.

St. John's University Jamaica, NY April 9, 2014 St. John's University Chapter of Sigma Pi Sigma held its annual Induction Ceremony on Wednesday, April 9<sup>th</sup> of 2014 in the Ballroom of D'Angelo Center. In addition to inducting eight new members to Sigma Pi Sigma, the event aimed to connect physics alumni with current students and local high school students through an egg drop contest, and alumni's sharing of their career experiences and contributions to various aspects of the society. Over fifty people attended this year's induction ceremony including: six local high school students, nine physics alumni, around fifteen current students of St. John's University including the inductees, about fifteen family members and friends of students and alumni, and eight faculty and staff members.



The alumni attendees of the event were (from left to right): Mr. Damon Urso, Mr. John Cariello, Ms. Rene Foley, Mr. Porez Luxama, Ms. Emily Lavelle, Dr. Lisa Dixon, Mr. Simon Odie, and Mr. Shaun McGrath. Another alumni guest Gregory Webb was absent from the photo.

The nine alumni attendees of the event were: Mr. John Cariello (B.S., '80), Principle Engineer Avionics Lead, Northrup Grumman Aerospace Systems; Dr. Lisa Dixon (B.S., '07), Research Scientist, Pixie Scientific Inc.; Ms. Rene Foley (B.S., '83), Senior Software Engineer, BAE Systems; Ms. Emily Lavelle (B.S., '03), Attorney, The Law Offices of Dominick W. Lavelle; Mr. Porez Luxama (B.S., '03), Teacher at the Brooklyn Technical High School and Executive Director of Life of Hope Center; Mr. Shaun McGrath (B.S. '01), Project

Superintendent; Mr. Simon Odie (B.S., '08), Electrical Design Engineer/Supervisor, Con Edison; Mr. Damon Urso, P.E. (B.S., '73), Project Manager, Nassau County Department of Public Works; and Mr. Gregory Webb (B.S., '10), Teacher at the Montfort Academy in Mount Vernon, NY.

Also attending the event were six local high school students who are participating in the St. John's University Science and Technology Entry Program (STEP). Teaming with the STEP program, St. John's SPS chapter has been conducting a total of nine physics workshops for the students in the STEP program since fall 2009 and such outreach activities have provided us the opportunities to connect with local high school students. Having some of these students to attend our Sigma Pi Sigma induction ceremony would allow us to enhance this connection and inspire them to pursue STEM careers.



Physics alumni Rene Foley and John Cariello, and high school student Andrew Peck were discussing how to package the egg during the egg drop contest.

The event began with an egg drop contest. After hearing from instructions from Dr. Huizhong Xu, faculty advisor of St. John's University Chapter of Society of Physics Students, students and alumni guests formed teams of 2-3 people and each team was provided with three

eggs, paper and scotch tapes to wrap them. Once packaged, the eggs will be dropped from the second floor of the D'Angelo Center, which is about 15 feet from the ground of the first floor. The eggs that stayed intact after the impact will be ranked according to their package size. The teams were very excited about the game and started to work on their package designs immediately. They were eager to present and test their finished packages after the official induction of new Sigma Pi Sigma members.

The induction ceremony was officially opened at 6:00 pm by Dr. Mostafa Sadoqi, chair of the Physics Department at St. John's University, who welcomed our physics alumni, high school students, current students, faculty and staff, and family members and friends of alumni and students to the event. Following the opening remarks by Dr. Sadoqi, Ms. Ashley Tucker, the 2013-2014 President of our SPS chapter, presented the mission and history of Sigma Pi Sigma and emphasized the various roles that Sigma Pi Sigma plays in servicing our society. In fact, as pictures of St. John's University SPS helping high school students from the STEP program were shown on the power point, the administrators and students of the STEP program attending the event nodded their heads and were very appreciative of the service St. John's SPS chapter did to the STEP program.



Ashley Tucker, the 2013-2014 President of our SPS chapter, was presenting the mission and history of Sigma Pi Sigma.

Dr. Huizhong Xu conducted the induction of new members. As the inductees' names were called, each inductee came forward to receive his or her membership certificate and ID card. The new inductees were congratulated by the audience with a big applause for their outstanding achievements. With the induction of eight new members this year, St. John's Sigma Pi sigma Chapter has inducted 47 members in the last five years and a total of 60 members since its establishment in 1973. Dr. Xu congratulated all inductees and conducted the charge to new members, and encouraged them to continue their commitment to honorable scholarship, to assist the development of interest in physics at all possible levels, to provide fellowship as traditional physicists or 'hidden physicists' to his or her professional community, and to offer their collective wisdom and perspective in the service of the larger society. In particular, he encouraged the new inductees with his personal motto: with physics, you can do anything!



Orlando Lopez, a physics junior at St. John's University, was inducted to Sigma Pi Sigma.

Following the induction ceremony, all attendees were invited to enjoy a buffet dinner. During the buffet reception, some of the students and the alumni guests continued to work on their egg packages, while others held conversations in small groups to get to know each other

and exchange thoughts on career options for physics majors. The conversations were very friendly, positive, and stimulating.



St. John's University students, local high school students, alumni, and faculty were enjoying the dinner buffet, networking with each other, and working on their egg packages.

At 7:00 pm, all teams participating in the egg drop contest assembled to display their egg packages and went to the test area to drop their packages. Although some eggs could not withstand the impact, three eggs actually survived and the smallest package size was 15.5 cm (Last year's record was 10.6 cm, but that was from a height of 6 feet), made by a team consisting of two physics alumni and one high school student! As the winning teams were congratulated by the audience and received prizes including bumble bee yo-yos and USB flash drives, the egg drop contest brought a lot of fun to the event and set a very joyful tone for the rest of the induction ceremony.



St. John's University students, local high school students, alumni, and faculty were displaying their egg packages during the egg drop contest.



Teams were ready to drop their egg packages during the egg drop contest.

Following the announcement of the egg drop contest results, our alumni guests were introduced by Dr. Xu to share their career experiences with our students. The event's first alumni speaker was Mr. John Cariello. John received his B.S. in Physical Science from St. John's University in 1980, and B.S. and M.S. in Electrical Engineering from the New York Polytechnic University. John is currently an Avionics Lead Engineer at Northrop Grumman. In his presentation, John talked about how his physics education background helped him develop his career and the various job possibilities a physics degree can provide. He also spoke about how the basic knowledge of physics and engineering can be applied in advancing technologies. He concluded his talk by showing a video of the Grumman F-14 Tomcat demonstrating the various cool things it is capable of. It was truly amazing for our students to see vivid examples of the roles played by physics in advancing technologies.



Mr. John Cariello (B.S. '80) was sharing his career experience with students.

Our second alumni speaker, Dr. Lisa Dixon, is a Research Scientist at Pixie Scientific Inc. Lisa received her B.S. in Physics from St. John's University in 2007, and her Ph.D. degree in Physics from the New York University in 2013. While Lisa's thesis work centered around measuring the influence of optical fluid systems, her current work at Pixie Scientific focuses on

the research and development of smart diapers that have embedded sensors monitoring health conditions. She talked about the importance of the math and physics preparation she had acquired during her undergraduate study at St. John's University. She mentioned that such preparation together with the critical thinking and problem solving training she has received during her doctoral study allowed her to explore a variety of job possibilities. She told our students that she sometimes still uses the physics and calculus knowledge she had acquired at St. John's in her daily work at Pixie Scientific, and encouraged our students to establish a solid math and physics foundation during their undergraduate study.



Dr. Lisa Dixon (B.S., '07) was sharing her career experience with students.

Our third alumni speaker is Ms. Rene Foley. Rene received her B.S. in Pre-engineering from St. John's University in 1983, and her B.S. and M.S. in Electrical Engineering from the New York Polytechnic University. She currently works as a Senior Software Engineer at the BAE Systems. Rene writes and integrates test software for equipment installed on military aircrafts. Rene made a strong point in her presentation that strong analytical and problem solving skills that she had acquired from her physics education were essential to her job responsibilities as a senior software engineer. She talked about the important role software plays in system

integration and how a small error in the software could cause a gigantic aircraft to break down. She encouraged our students to be critical thinkers and be open-minded when launching their careers upon graduation.



Ms. Rene Foley (B.S., '83) was sharing her career experience with students.

Our next alumni speaker, Mr. Porez Luxama, whose family migrated from Haiti to America, talked about his experience of receiving higher education and teaching in the US. Porez received his B.S. in Mathematical Physics from St. John's University in 2003, and his Master of Education degree from CUNY-Brooklyn College in 2008. He is currently a teacher at the Brooklyn Technical High School. In 2006, he established the Life of Hope Educational and Training Center, a non-profit organization that offers services in the areas of literacy, numeracy, and computer skills to all community members. He talked about the challenges facing the immigrant community in obtaining the education the community members need to realize their potential as individuals, parents, and citizens. He asked our students to cherish the education they are receiving and to support the mission of ensuring all community members have access to the education they need.



Mr. Porez Luxama (B.S., '03) was sharing his career experience with students.

The next alumni speaker was Mr. Shaun McGrath, who received his B.S. in Mathematical Physics from St. John's University in 2001, and a Master of Engineering degree from Cornell University in 2005. Shaun gave a presentation entitled "From the Classroom to the Job Site: SJU Physics & Large-Scale Construction". He talked about how his physics degree benefited his engineering career. Shaun mentioned his many years of professional experience in civil infrastructure, structural design and project engineering working on projects from MGM's \$8 billion project City Center in Las Vegas to the new Downtown Transportation Hub at the World Trade Center in New York City. He is currently working as a project superintendent for a mid-rise residential tower in NYC. He gave vivid examples of how his training in physics helped him quickly adapt himself to his positions in the engineering fields, and strongly encouraged our physics graduates to obtain a solid training in physics even if they want to pursue a career in applied fields such as engineering. His presentation was well received and was interrupted by many interesting questions from the students and faculty.



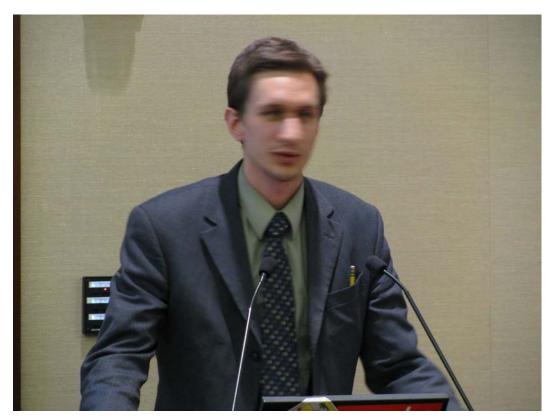
Mr. Shaun McGrath, P.E. (B.S., '01) was sharing his engineering career experience with students.

Our next alumni speaker was Mr. Simon Odie, who received his B.S. in Physics from St. John's in 2008, and M.S. in Systems Engineering from the NYU Polytechnic University in 2012. While he is currently working as an Electrical Design Engineer at Con Edison, he is also pursuing his Ph.D. in Electrical Engineering at NYU. Simon spoke about his education path and how the internships he had after undergraduate education helped him land a permanent job at Con Edison. He discussed the key elements that he believed contribute to his career success: patience, knowledge, and respect. He encouraged our students to learn as much as they can during their undergraduate study at St. John's, choose a career they like, and succeed with patience.



Mr. Simon Odie (B.S., '08) was speaking about his career and graduate study experience.

Our last alumni speaker of the evening was Mr. Gregory Webb. Gregory received his B.S. degree in Physics from St. John's University in 2010. He is currently working as a high school math and science teacher at the Montfort Academy in Mount Vernon, NY. Gregory talked about how his education at St. John's helped him land a job at Montfort Academy. He shared some useful tips about his teaching experience with the audience such as planning ahead about one's career path and not selling the textbooks after you are done with the courses since you may need them at some point later on. Gregory's honest sharing of his experience made the audience laugh quite a lot and some of our current students and high school students who were interested in teaching careers also asked a number of questions. The audience gave Gregory a big applause at end of his presentation!



Mr. Gregory Webb (B.S., '10) was speaking about his career experience.

At the end of our alumni presentations, Dr. Xu presented each guest speaker a Certificate of Appreciation and a gift to thank them for taking time out of their busy schedule to come to St. John's and to inspire our physics students. Dr. Xu concluded the ceremony by encouraging all students to get the most out of their education and keep open-minded regarding what they can do with a physics degree! He also thanked everyone who came to attend the induction ceremony and acknowledged the generous support from the SPS National Office and St. John's University that made the event possible and a great success!

## **Expenses:**

Food, Beverage, and Utensils: \$761.66 Certificates and Gifts for Alumni: \$108.33 Prizes for the Egg Drop Contest: \$104.42

Total: \$974.41



Teams participating in the egg drop contest were working on their egg packages.



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Teams participating in the egg drop contest were working on their egg packages.



A team of high school students were working on their egg packages.



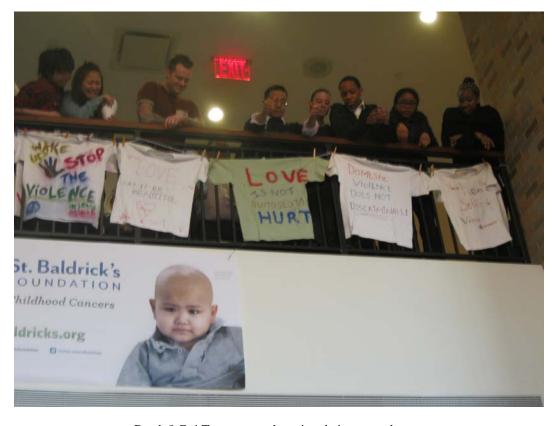
Steven Jelcic, a physics senior and a new Sigma Pi Sigma inductee, was displaying his egg package. Will it survive the impact?



Students were confident about their "parachute" egg package!



Teams were displaying their egg packages during the egg drop contest.



Ready? Go! Teams were dropping their egg packages.



Happy to be a new inductee of Sigma Pi Sigma!



A token of appreciation for our alumni speaker, Mr. John Cariello.



A token of appreciation for our alumni speaker, Mr. Porez Luxama.



A token of appreciation for our alumni speaker, Mr. Simon Odie.



The audience was listening to Ashley's presentation on the mission and history of Sigma Pi Sigma.



The high school students and their family members were enjoying the food and conversations.



The audience was absorbed in John Cariello's presentation on job possibilities for a physics degree!



Students and family members pose for a nice photo!



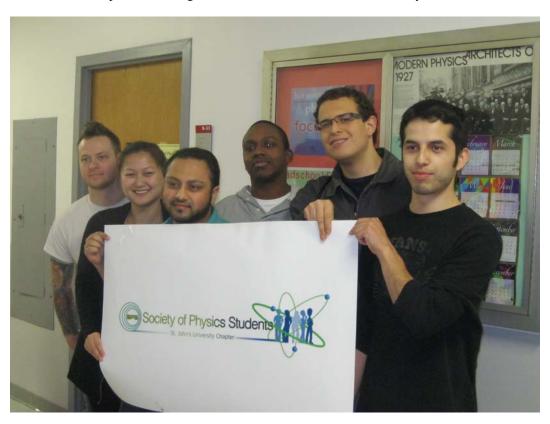
St. John's Physics Students pose for a nice photo!



A nice photo of our alumni attendees of the event!



A nice photo of the high school student attendees and their family members!



A group photo of the 2014 inductees (from left to right): Thomas Campbell, Xuejiao Che, Vimal Singh, Paul Priester, Steven Jelcic, and Orlando Lopez. Inductees Alyssa Stone and John Bello were absent from the photo.



A group photo of the 2013-2014 St. John's University Chapter of SPS e-board members (from left to right): Secretary, Benjamin Czerwin; President, Ashley Tucker; Treasurer, Orlando Lopez; Vice President, Kenneth Wengler.