



# SIGMA PI SIGMA

The physics honor society

## Sigma Pi Sigma Chapter Project Award Proposal

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Project Proposal Title	Connecting Students, Community and Alumni to Inspire Tomorrow's STEM Leaders
Name of School	St. John's University, Jamaica, NY
Sigma Pi Sigma Chapter Number	303
Total Amount Requested	\$500.00

### Abstract

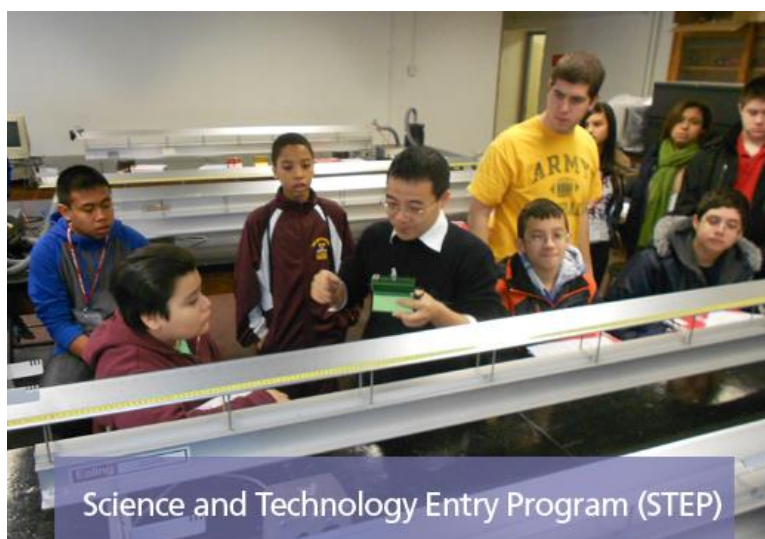
The St. John's University chapter of Sigma Pi Sigma plans to host its 2014 induction ceremony by inviting St. John's students and faculty, alumni, and students from local high schools and their parents to celebrate the achievements of our students and alumni and to inspire St. John's students and high school students from local communities to become the next generation STEM leaders. The ceremony will start with an egg drop contest to inject fun and physics into the event. Following the contest, new members will be honored and inducted to Sigma Pi Sigma. The main part of the ceremony is for our current students and alumni to share their stories of professional development from a physics student to a member of society making contributions in various STEM fields. By inviting local high school students and their parents to the event, the ceremony will foster interaction between students, alumni, and local communities and inspire St. John's students as well as local high school students to become tomorrow's STEM leaders. The award will be used to cover expenses for the contest materials, prizes, and the ceremony dinner.

# Proposal Statement

## Overview of Proposed Project

The Society of Physics Students (SPS) Chapter at St. John's University, a primarily undergraduate institution, has become a vibrant student organization in the past five years as a result of the strong efforts by its members. The Sigma Pi Sigma Chapter was also recently revived and has inducted a total of 39 fine physics undergraduates in the past four years. In addition to encouraging the study of physics and honoring those with outstanding academic achievements, our SPS and Sigma Pi Sigma chapters have also engaged in a variety of activities to assist St. John's students of various majors with their physics courses and to promote a science and engineering education among the local community.

Our SPS chapter has been organizing a series of events and physics seminars each semester to promote fellowship among students, foster interaction between students and faculty, and encourage undergraduate research. On November 7th of 2013, St. John's SPS and Sigma Pi Sigma chapters co-organized the St. John's University Meeting of the Minds Science Banquet to promote undergraduate research on campus. We are also committed to promoting education of science and engineering among the general public by participating in various outreach activities. Teaming with St. John's Science & Technology Entry Program (STEP), St. John's SPS chapter has been conducting a total of eight physics workshops for the students in the STEP program since fall 2009. During these workshops, students from local middle and high schools gain hands-on experience by performing experiments adapted from our College Physics lab class. The workshops were well received by the high school students as reflected by their positive responses on their feedback forms. Working with St. John's Academic Service Learning (ASL) program, St. John's SPS chapter also goes to local high schools and communities to give workshops to stimulate our younger generation's interest in science.



Members of St. John's SPS chapter were assisting middle and high school students in the STEP program at the "Collisions & Momentum Conservation" Workshop on March 16, 2013.

With the generous support of the Sigma Pi Sigma national office and the St. John's University, St. John's Sigma Pi Sigma chapter has successfully hosted four induction ceremonies from 2010 to 2013, honoring the outstanding achievements of our students and alumni. All events were well received by the

students and their families and friends, invited guest speakers, and faculty and staff. Students were especially interested in networking with alumni and asked them for career advice.

Given the challenges faced by our society in promoting STEM education and building tomorrow's STEM leaders, we think it will be a great idea to invite high school students from local communities and their parents to our induction ceremony. The outreach activities we have been doing in partnership with the St. John's University STEP program and the Academic Service Learning program have provided us the opportunities to connect with local high school students. We'd like to enhance this connection by inviting some of these students to our Sigma Pi Sigma induction ceremony and inspiring them to pursue STEM careers.

The Sigma Pi Sigma induction ceremony and the dinner banquet following the ceremony will be held in the afternoon and evening of April 16, 2014. We will invite 7-8 local high school students plus their parents and 5-6 physics alumni to the ceremony. About 15-20 Sigma Pi Sigma members including new inductees and their guests, and 10-15 students and faculty members from all science departments of the St. John's University are expected to attend the event. A total of 60 attendees are thus expected at the ceremony.

The event will start with an egg drop contest where teams will compete in inventing methods to drop eggs safely from a certain height. We expect the contest should bring a lot of fun to the event, especially with the participation of high school kids. The formal ceremony will be opened by the Chair of the Physics Department, followed by induction of the new Sigma Pi Sigma members. The main part of the ceremony is for our current students and alumni to share with the audience their experience of professional development from a St. John's student to a member of society making contributions in various STEM fields. We expect the event will promote students' interest in physics, provide opportunities for students and faculty, alumni, and the local communities to interact with each other, and inspire the younger generation to become tomorrow's STEM leaders.

### **How Proposed Project Meets the Purpose of the Award**

- By inviting local high school students and their parents to our Sigma Pi Sigma induction ceremony, it will raise the awareness of Sigma Pi Sigma in the local community and promote the study of science among the younger generation.
- Since a half dozen alumni are expected to attend the event and interact with our students and local high schools, the event will build community among local alumni, new and current Sigma Pi Sigma members, and local high school students.
- We expect to induct 7-8 new members into Sigma Pi Sigma, bringing the total number of inductees to more than 45 in five years.
- Our SPS chapter has been named one of the outstanding chapters by the SPS national office for two consecutive years. We will celebrate these achievements at the event and also make our SPS chapter more visible to the community.

## Plan for Carrying Out Proposed Project

- Personnel planning and organizing the event:  
SPS President: Ashley Tucker  
SPS Vice-President: Kenneth Wengler  
SPS Secretary: Ben Czerwin  
SPS Treasurer: Orlando Lopez  
SPS Public Relations: Dania Chaban  
SPS Recruitment Officer: Elizabeth McCarthy  
The team will be assisted by Ms. Mary Ann Frohnhoefer, secretary of the Department of Physics and Dr. Huizhong Xu, faculty advisor of SPS.
- Marketing  
Invitation letters will be sent to alumni and local high school students. Emails will be sent to current students and faculty of St. John's University to invite them to the event. Event flyers will be made and posted on the St. John's University Website and on bulletin boards at various places on campus.
- Sigma Pi Sigma member participation  
We expect to induct about 7-8 new members into Sigma Pi Sigma at the ceremony. About five to six current Sigma Pi Sigma members are also expected to attend the event. In addition, 10-15 students and faculty members from all science departments of the St. John's University are expected to attend the event.

## Project Timeline

April 16, 2014	St. John's University 2014 Sigma Pi Sigma Induction Ceremony
April 7, 2014	Materials and prizes for egg contest prepared, and banquet items ordered
March 31, 2014	Deadline for alumni, high school students and guests, current students and faculty to confirm attendance
March 16, 2014	Invitations sent out to current students and faculty
March 16, 2014	New inductees' information sent to the Sigma Pi Sigma national office and reception items ordered
March 15, 2014	Deadline for inductees to reply to invitation
February 15, 2014	Invitations sent out to new inductees
February 1-15, 2014	New inductees selected by committee
January-February, 2014	Invitations sent out to alumni and local high school students

## Project Evaluation Plan

The project will be evaluated in the following aspects. The number of participants will be recorded by asking attendees to sign in at the event and this number will be compared with our expected number of 60 participants. A post-event survey will be conducted to get feedback from the participants. Suggestions and feedback will also be sought by speaking with current students and faculty directly after the event.

## Budget Justification

We will use the award to cover expenses for materials and prizes of the egg drop contest and the dinner banquet. The remainder cost of the dinner banquet and other necessary expenses on items such as invitations and decorations will be covered by solicited contributions from the St. John's University.

The egg drop contest will bring a lot of fun to the event. It will require students to apply physics knowledge in conjunction with critical thinking abilities and teamwork to solve an interesting problem. We had this contest at the 2013 induction ceremony and it was a huge success. We expect participants will be excited about this contest especially given the participation of high school students.

The dinner banquet will provide all participants of the event opportunities to network with each other and bring our alumni, students and faculty, and local communities closer, spark friendly and productive communications, and promote fellowship among them. These friendly conversations will inspire our students and local high school students to pursue science and technology careers and become tomorrow's STEM leaders.