

SPIE Student Activity Annual Report

1. Student Organization Officer:

President: Han Wang

Member#: 4008416

E-mail: han2014@my.fit.edu

Vice President: Ce Su

Member#: 3748037

E-mail: yyang2011@my.fit.edu

Treasurer: Swaroopini Harish

Member#: 4108614

E-mail: sharish2014@my.fit.edu

Secretary: Gregory L Lovell

Member#: 3503260

E-mail: gl Lovell@my.fit.edu

2. Student Members:

Abdelgader Alsalhin

Claudio Augusto Barreto Saunders Filho

Sahin Gullu

Swaroopini Harish

Ahmed Laarfi

Shenjie Miao

Stephanie Miller

Navaneeth Premkumar

Mingxuan Tu

Han Wang

Ce Su

3. Detail of Student Chapter Activities

1. *Special Event: Student involvement fair*

We attended the annually student involvement fair in the beginning of fall semester at Florida Institute of Technology. We hung the banner of SPIE student chapter and posters of conference paper that our chapter wrote last year. We also demonstrated a bunch of optical kits that we applied from SPIE and OSA to attract fresh man. We presented the RGB principle LED with color filter, different shape diffraction lenses, and 3-D Holography films. A lot of students were attracted by our presentation and left their information. A couple of freshmen finally joined in our chapter.

2. *Special Event: 2018 Engineers Week at Florida Tech*

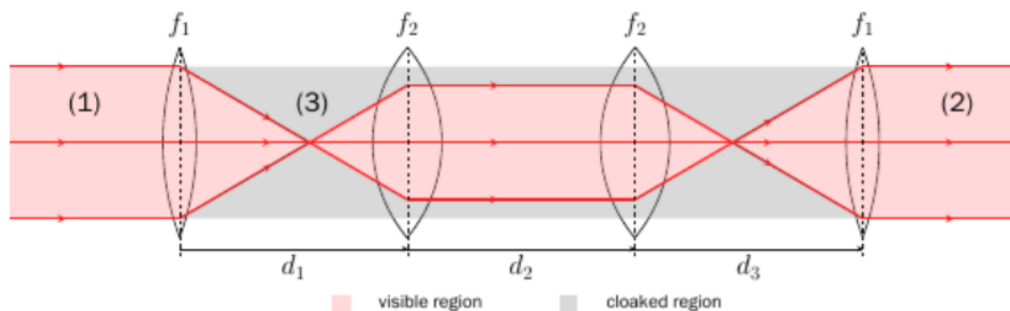
The electrical and computer engineering department and our chapter cooperate the 2018 Engineers Week at Florida Tech include a series of engineering Olympics and presentations. Our chapter independently hosted the Olympics Day 1 in the Clemente Center. Our topic is to set up

the Rochester Cloak experiment.

The Rochester Cloak is the first perfect paraxial ray optics cloak, developed by University of Rochester. It uses four converging lenses to redirect light from the background behind a cloaked object in such a way that it never comes in contact with object, and the viewer sees only the background as it would be if the object were not there.

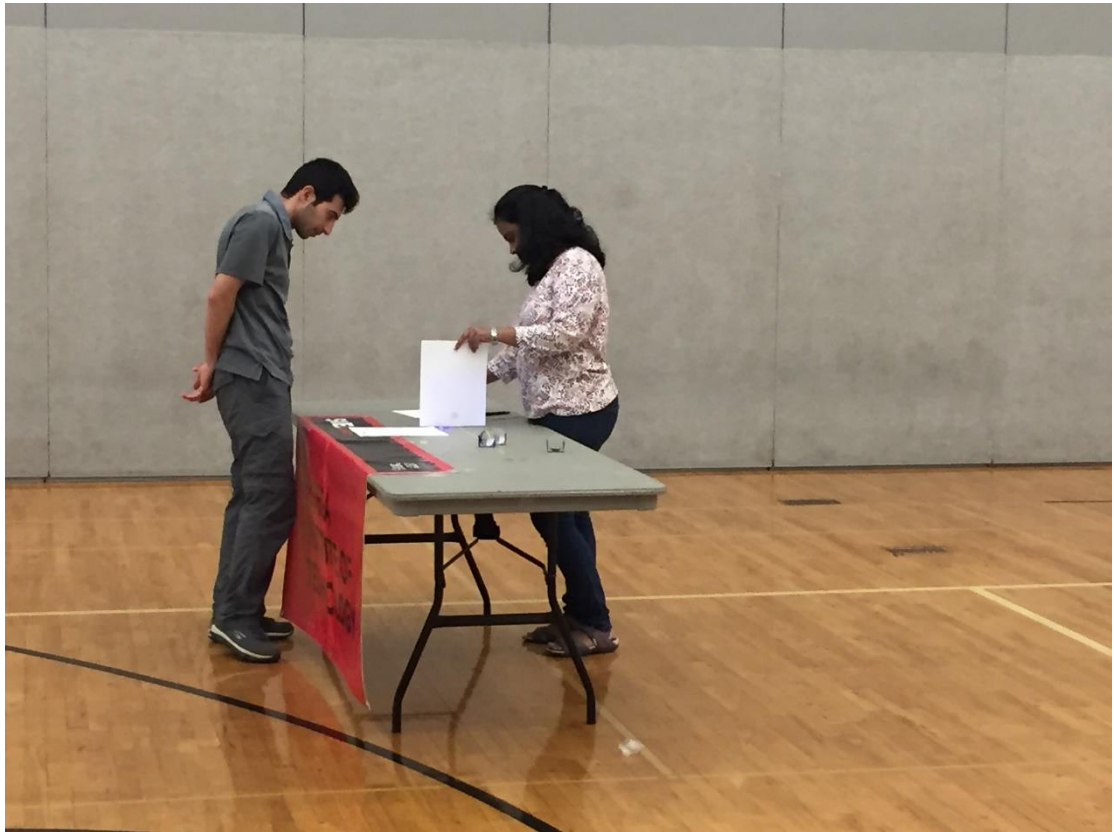
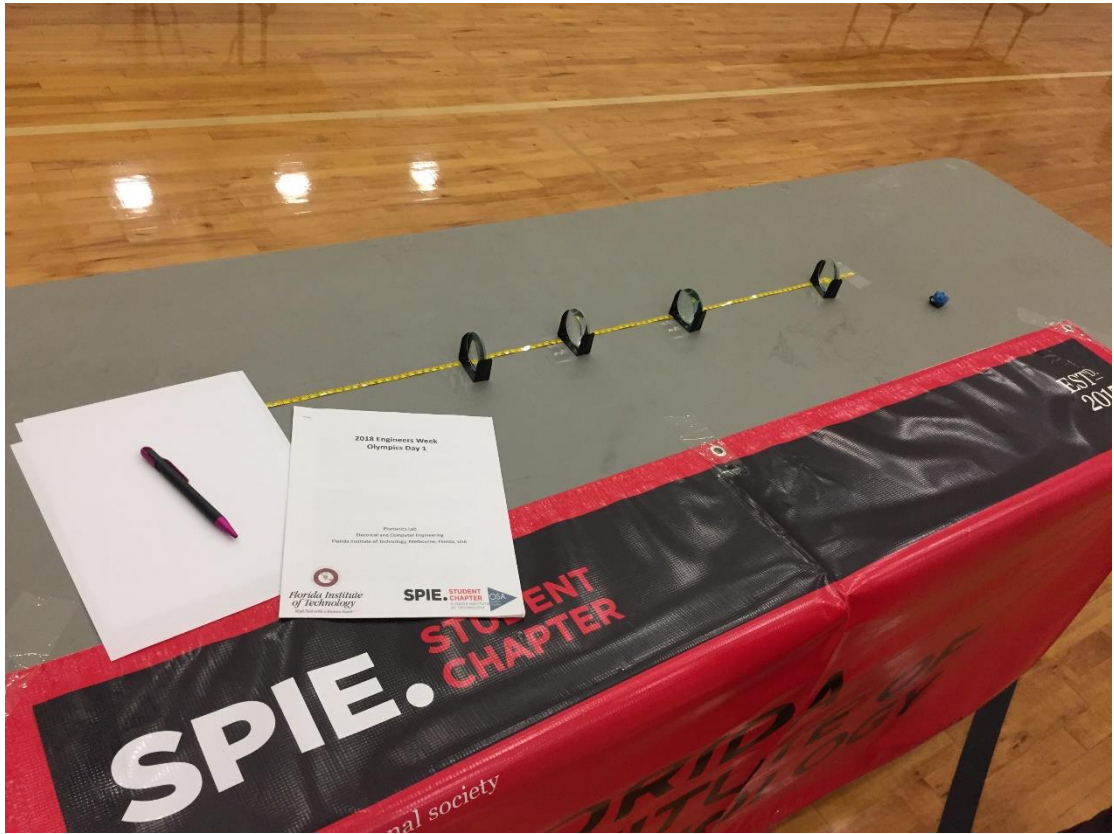


The Rochester Cloak consist of two pairs of convex lenses, each pair having a different focal length. The lenses are set up in a straight line, with the thicker lenses in the middle and the thinner lenses on the ends. The thin lenses have focal length f_1 , and the thick lenses focal length f_2 .



Many students joined in this competition. Some photos are attached below.

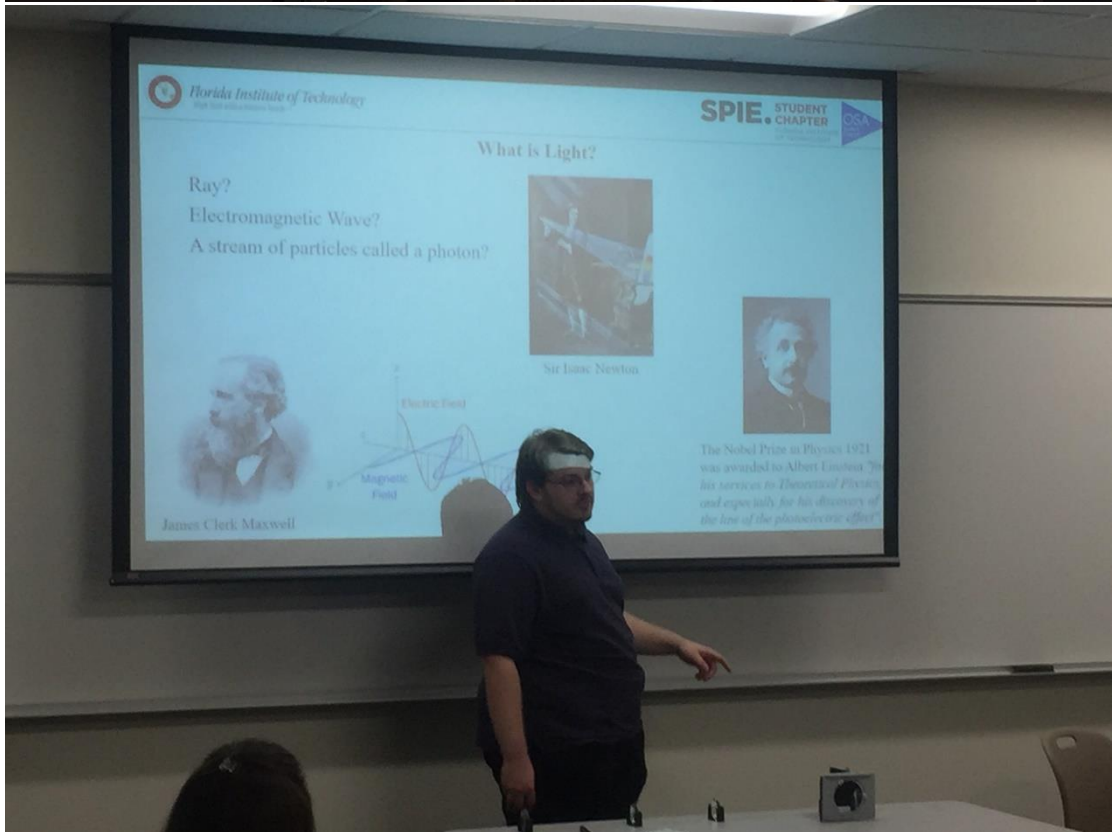




3. Outreach speak at Florida Tech

During the Engineers Week, we also hosted an outreach program at Florida Tech. The middle and high school students and their parents took part in a one hour speech that presented by Dr. Michael Finch.





4. *Conference*: 2018 Fio+Ls Conference and AVFOP 2018

Ce Su and our chapter advisor Dr. Syed Murshid represented our chapter attended 2018 OSA Student leadership conference and 2018 Fio+Ls conference in Washington DC on September. Two papers are published and presented.

4. Planned Future Events:

We are currently in the planning stages on giving some lectures / lab exercises of our own to students of Melbourne and Brevard region. With the inclusion of outreach kits from both OSA and SPIE, we are in talks with Florida Tech faculty on giving presentations and discussions with local home school students and possibly some middle/high school students of the region as well. We are trying to obtain more funding to provide us with a better array of kits before we go through with the endeavor.

5. Financial Information:

Beginning Funds: \$0

Funds Raised: \$412

Funds Spent: \$0

Details of SPIE funding received: We have tried to apply the funding a couple of times since the beginning of our chapter. However, we didn't get any funding from SPIE due to some requirements are unsatisfied. We have hopefully addressed this. If the funds are approved, we will spend it on kits for STEM events.

Other Funding Sources: OSA Organization: \$312. Florida Tech: \$100.

Ending Balance: \$412.