



Janessa Slone and the Wooden Orbital Model (SOCK 2022)

Janessa puts on her S.O.C.K.s

Janessa Slone

SPS SOCK Intern / Embry-Riddle Aeronautical University (Prescott)

Brad Conrad

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Who am I?

Janessa Slone

- **Senior** at Embry-Riddle Aeronautical University
- Previously funded by **AZ NASA Space Grant** Consortium
- Active **SPS Member**
 - SPS SOCK Intern
 - SPS AZC (2 terms)
 - SPS Chapter President (2 terms)

This Summer, I worked on ...

Astronomy on the Mall

50,000 person outreach event on the National Mall

Demonstration Library

New demos uploaded to various platforms

Physics and Astronomy Jeopardy

Astronomy focused!

S.O.C.K

Science Outreach
Catalyst Kit for
chapters' outreach
programs



SPS Interns at Astronomy on the Mall

01 Astronomy on the Mall

Astronomy on the Mall

Planning

Research demos ,
purchase supplies,
logistics

Organizing

Develop and tested,
perform each demo,
volunteers

Presenting

Sharing our passion for
Science with future
generations



- Electromagnet
- Boom Whackers
- Cloud in a Bottle
- Fabric of Spacetime
- Telescopes
- Diffraction
- Helmholtz Resonators



Janessa Slone performing the Cloud in a Bottle Demo

02 Demonstration Library

7 New Demos

Added to the SPS Demonstration Library

Electromagnet

Jolly Rancher Bubbles

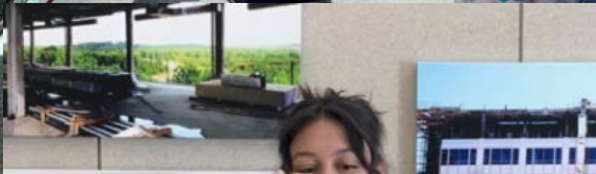
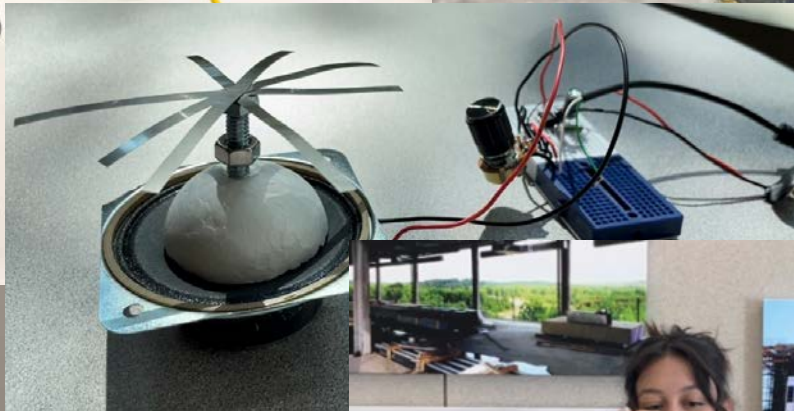
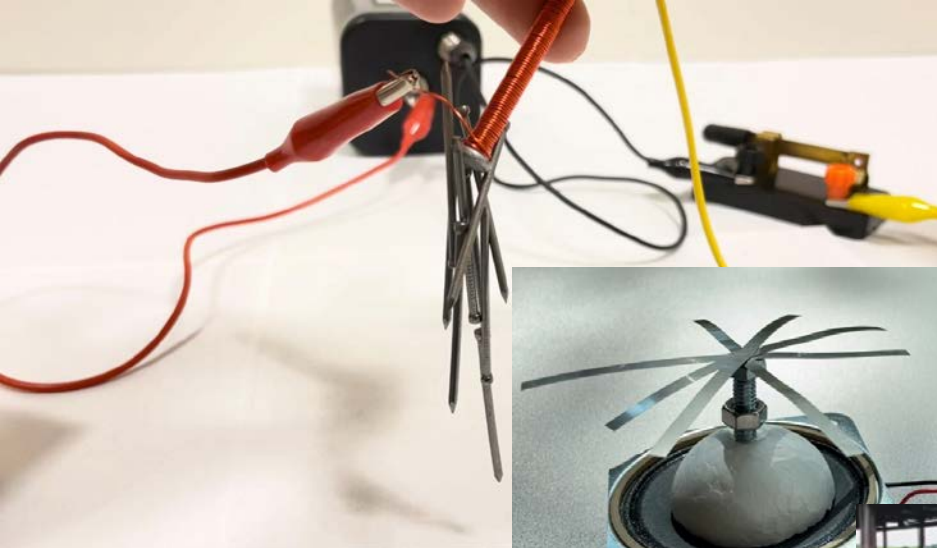
Cloud in a Bottle

Fireworks in a Glass











Laminar Flow

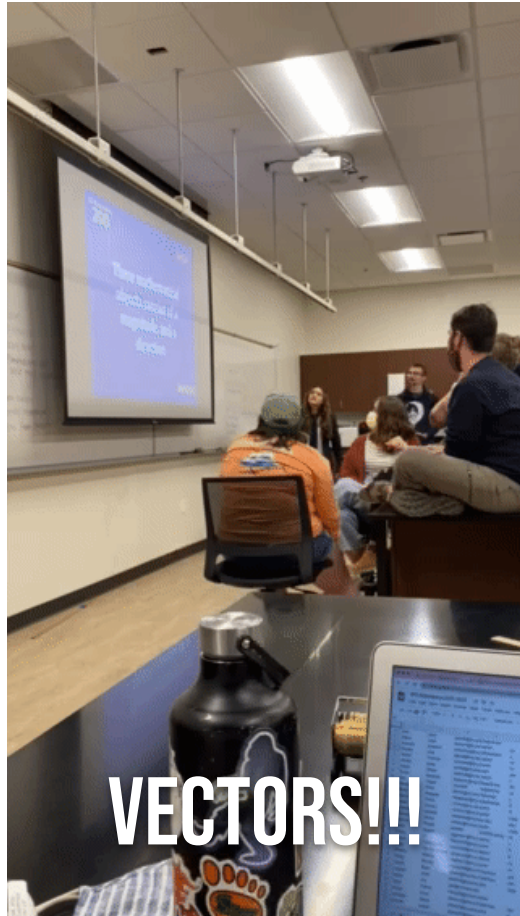
Smoke Cannon

Metal Resonance

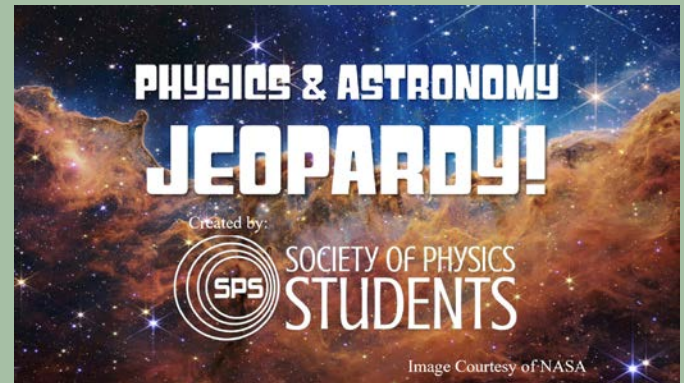


Videos on Social Platforms

<input type="checkbox"/>		Vortex Cannon! Find out how to make your own vortex cannon here :...	 Scheduled
<input type="checkbox"/>		How To: Wooden Orbital Model (SOCK) This is a quick demonstration showing the orbits of the Earth and Moon! Order your...	 Scheduled
<input type="checkbox"/>		How To: Fireworks in a Glass Create beautiful 'fireworks' in this amazing density demo! This demonstration can be...	 Scheduled
<input type="checkbox"/>		How To: Cloud in a Bottle Learn how to make a Cloud in a Bottle in a few easy steps! This demonstration can b...	 Scheduled
<input type="checkbox"/>		How To: Electromagnet Learn how to make 2 versions of an Electromagnet. This demonstration can...	 Public

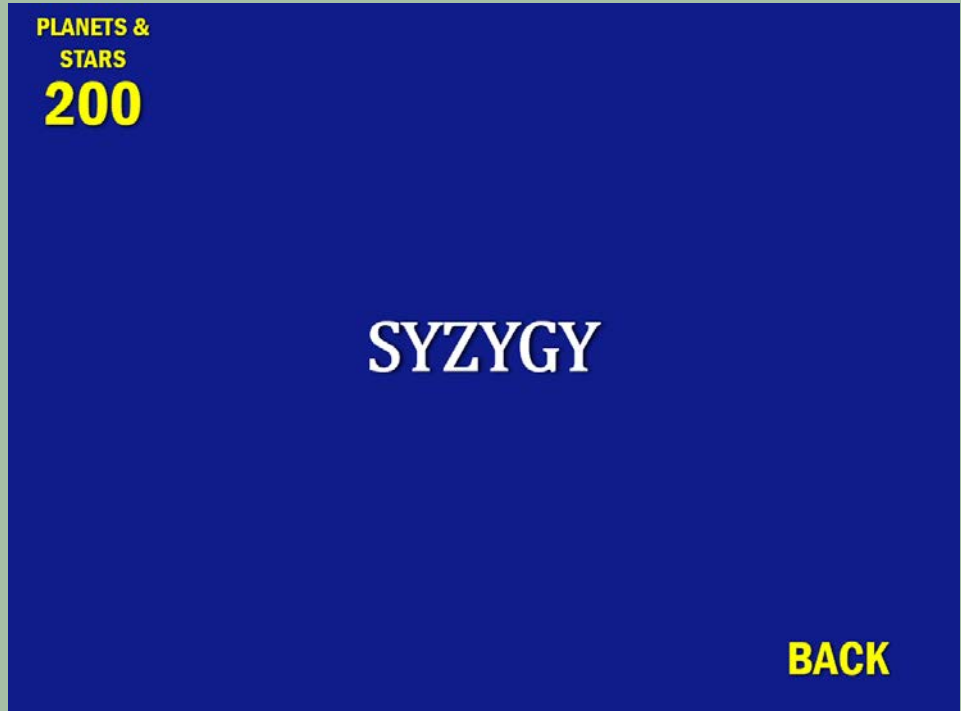


03 Physics and Astronomy Jeopardy



Astronomy Theme

- Revamped questions
 - Astronomy
- New categories
 - Alphabet Soup
 - Equations
 - Planets & Stars
 - Relativity
 - General
 - Miscellaneous





04
S.O.C.K.

SOCK timeline



Week 1-2

Brainstorm SOCK
theme ideas



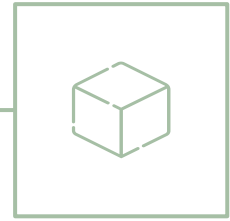
Week 3-4

Build a plan
for 'Eclipses'



Week 5-6

Order materials and write
instruction guides



Week 7-9

Pack SOCK
Boxes

Components of the S.O.C.K.

- Wooden Orbital Model
- Scale the Solar System Demo
- Paper Model Demo
- Solar Eclipse Glasses
- Brass Brads
- Pinhole Viewer
- Presentation guides
- Thumbdrive:
 - Paper Model Template
 - Safety Guide
 - Instructions for each demo
 - Presentation Guides



Thanks!

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