

Spreading Science to the next Generation Through an Assortment of Science Demonstrations

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SPS SOCK (Science Outreach Catalyst Kit) Intern

Mentored by Brad Conrad

Why Outreach?



SPS and Outreach

Demos

+



SOCK

+

JEOPARDY!



SPS and Outreach



3-5 demonstrations
20-25 chapters served
\$80 per box






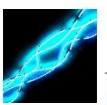


1+ demonstration
100 chapters served
\$20 per box



20 Demonstrations
All 820+ Chapters served
\$5-\$20 per demo

Demonstrations

					
Astronomy	Acoustics	Optics	General Physics	Mechanics	Electricity & Magnetism
<ul style="list-style-type: none">• Eclipse model• Composition of the Universe• Fabric of the Universe I & II<ul style="list-style-type: none">• Pinhole Projector• Gravitational Waves in Jello• Cakeraters• Pulsar	<ul style="list-style-type: none">• Straw Oboe• Tuning Fork Workshop• Chladni Plates Violin Bow• Chladni Plate Speaker• Rubens' Tube• Rijke Tube	<ul style="list-style-type: none">• Variable Index of Refraction• Polarization of Light• The Speed of Light• Reflection & Refraction<ul style="list-style-type: none">• Light Fountain• Hair Diffraction	<ul style="list-style-type: none">• Borate Glass<ul style="list-style-type: none">• Liquid Nitrogen Ice Cream• Vortex Cannon• Slimy Spaghetti and Meatballs• Pendulum Waves	<ul style="list-style-type: none">• Density Column• Egg Drop• Egg Crusher	<ul style="list-style-type: none">• Ferrofluids• Cell Phone Charger• Homopolar Motor<ul style="list-style-type: none">• Eddy Currents• Simple Motor<ul style="list-style-type: none">• Audio Amplifier



Demonstrations



**Instruction
Document**



Video

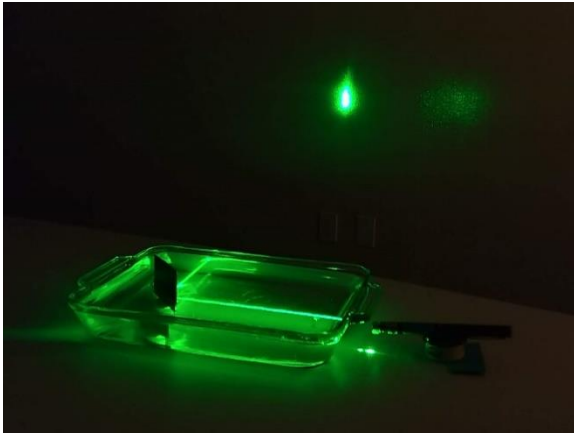


Categorized

Science Outreach Catalyst Kit (SOCK)



Science Outreach Catalyst Kit (SOCK)



Science Outreach Catalyst Kit (SOCK)

ASTRONOMY
GRAVITATIONAL WAVES
IN JELLO

SPS OUTREACH



Science Outreach Catalyst Kit (SOCK)

ASTRONOMY **CAKERATERS**

SPS OUTREACH



Science Outreach Catalyst Kit (SOCK)



Thank You!



Brad Conrad
Kayla Stephens
Steve Mackwell



Donna Hammer & UMD Physics Dept.

SPS 2019 Interns/Friends

Embry-Riddle Aeronautical University

Questions?



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