

Hands-On Fusion and Plasma Activities for your Classroom

October 22, 2019

APS Division of Plasma Physics Meeting

Teacher's Day

Workshop Leaders

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All are associated with CPEP* (Contemporary Physics Education Project)
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*CPEP (see <http://www.CPEPphysics.org>) is a not-for-profit corporation of physicists, teachers, and educators dedicated to the development of teaching materials on topics in contemporary physics. These materials are intended for use in the introductory (high school and college) physics classroom. New materials are being developed for middle school physical science.

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Plan for the Workshop

- 1) We will explore several activities that can be used in your classrooms. These activities are available online at cpepPhysics.org. Just click on the Fusion poster, then Student Activities. Contact one of the workshop leaders for the password to access the teachers' notes.

- A) Simulating Fusion¹
- B) Testing a Physical Model²
- C) Long Range Repulsion, Short Range Attraction¹
- D) Modeling the Interactions in a Nucleus²
- E) The Physics of Plasma Globes¹
- F) Plasma Globe and Spectra²
- G) Plasma Globes and "Body Capacitance"¹
- H) Resistance of a Fluorescent Bulb¹

1 – high school friendly; may require modification for middle school accessibility

2 – middle school friendly

- 2) Final discussion and evaluation; distribution of 30-pack of notebook-size charts