

## **Meeting Announcement and Call for Presentations**

**2015 Spring Meeting - April 10, 11, 2015**  
**Michigan State University**

**Deadline for Presentation Proposals: Friday, March 13, 2015**

**Are you interested in physics, physics education, or science literacy? If so, you are invited to the Spring 2015 meeting of the Michigan Section of the American Association of Physics Teachers! Join colleagues from across the state to exchange innovative ideas in the teaching and learning of physics.**

***Starting out Friday Night with a public Talk by Brian O'Shea, Associate Professor of Physics, Michigan State University***

Brian's research focuses on theoretical and numerical studies of galaxy formation and evolution, primarily using the Enzo adaptive mesh refinement code. He is particularly interested in the formation of the first stars, galactic chemical evolution, and the astrophysics of galaxy clusters. He is also interested in petascale computing, because many problems in astrophysics rely on numerical simulations to make theoretical progress. As the questions we ask become more difficult, so too must the calculations we undertake in our efforts to answer them.



***Featured speaker: Vashti Sawtelle, Associate Professor of Physics, Physics Education Research Lab, Michigan State University***

Vashti Sawtelle is physics education researcher who studies how learning environments support (or inhibit) students from diverse backgrounds in their learning physics. She focuses her work on understanding the role active learning, modeling, and interdisciplinary classrooms (e.g., physics for biologists) have to play in creating supportive learning environments for all students.



***Meeting location: Michigan State University, East Lansing, Michigan***

Information on area hotels, parking, and maps for MSU can be found at: <http://www.msu.edu/visitors/index.html>. Stay tuned for the full program announcement for details about hotels, parking, and lunch on Saturday.

## *Highlights*

***Public Talk: Friday, April 10 6:00pm-7:15pm***

***Brian O'Shea***

### **Disaster... From the skies!**

Who hasn't had a day where they feel that the Universe was out to get them? Well, it turns out that it's true. In this talk, I will describe the myriad ways that the Universe is out to destroy the Earth (or, at the very least, every living thing on the Earth). This includes rogue black holes, supernovae, massive asteroids, and more! I'll explain what these objects are, how we are trying to detect them, and what if anything can be done if we DO detect one coming right for us. Bad science fiction movie-related jokes will abound.

Gather afterwards for discussion and refreshments

***Keynote address: Saturday, April 11***

***Vashti Sawtelle***

### **Why aren't there more women in science?**

The underrepresentation of women in physics has been well documented and is a source of concern for both policy makers and educators. As a field, physics education has made progress in understanding the issues at play for women in physics courses. In this talk we'll discuss the current status of women in physics, what we know from research into the representation of women in physics, and guidelines for what we as instructors can be doing to create more equitable learning environments for all students.

***National Superconducting Cyclotron Lab Tour***— learn what happens in a rare isotope facility and why.

***Contributed Presentations***—hear from fellow physics teachers and students about their research/ideas/methods

***Photo Contest:*** We will be holding a high school physics photograph contest, based on the AAPT photo contest that is held at the Summer Meeting. Teachers can develop their own rules for the contest to fit their students and situation, but we would like to encourage the top examples to be submitted to the AAPT contest. A prize will be awarded.

***SCECH***—an application is being made so that teachers can receive SCECHs for the meeting.

***MIAAPT Mission Statement:*** The Michigan Section of the American Association of Physics Teachers is dedicated to promoting excellence in physics education in the state of Michigan and to supporting physics educators statewide. This organization shall endeavor to advance the knowledge of physics, to improve the teaching of physics, and to interest an increasing number of young people in making a career of physics.

**Presentation Information:** All who are planning to attend the meeting are also encouraged to contribute presentations on favorite physics demonstrations, classroom experiences, teaching experiments (*i.e.*, teaching a familiar topic with a “new twist”), and ongoing projects in teaching or scholarship. Presentations at the meeting may take on a variety of forms, including the following:

- **Oral Presentations** may be formal (*i.e.*, PowerPoint) or informal. Engaging presentations, including those that are interactive with the audience, are always highly encouraged. Oral presentations are limited to **15 minutes** each, including follow-up questions and discussion. There will only be 8 presentations this year because of a tight schedule
- **Workshops** for high school teachers and college faculty form an integral part of every meeting. Workshops, usually 2 or 3 hours long, will be scheduled Saturday afternoon (April 11). Unless announced ahead of time by the presenter(s), workshop registration takes place on a “walk-in” basis.
- **Poster Presentations** are welcome especially if you wish to share teaching ideas or apparatus for which the time constraints might not work for an oral presentation.
- **My Favorite Demonstrations and “Physics Puzzlers”** are quick but unique physics demonstrations with which to share favorite challenge questions or to share unexpected or unusual outcomes from an experiment. These are limited to **5 minutes** each.

***If I want to contribute a presentation, how do I submit information about it?***

You may fill out the google form using the link, <http://goo.gl/forms/FU2ulluVwe>, or complete the attached “**Presentation Proposal Form**” on page 4 (you can complete it electronically in Microsoft Word) or compile the following information about your presentation:

1. **Type of presentation** (oral, workshop, poster, or My Favorite Demo/Physics Puzzler)  
*NOTE:* If it is a **workshop**, please indicate at which times you could present.
2. **Title** (10 words maximum...longer titles will be edited to 10 words or fewer)
3. **Name and contact information of (primary) presenter** (school, institution, or other affiliation; address; phone number; and e-mail address)
4. **Brief description** (100 words maximum) of your presentation
5. **Description of any A/V equipment needed.** (Rooms for oral presentations and workshops will be equipped with computer projector and overhead projector.) It is the **presenter’s** responsibility, though, to bring a laptop and any special equipment.

Please submit your completed “Presentation Proposal Form” so that it arrives **by Friday, March 13**. Please use this link, <http://goo.gl/forms/FU2ulluVwe>, to submit a google form, **or** send the form on page 4 by e-mail or “snail mail” to:

Les Latham  
Port Huron Northern High School  
1799 Krafft Rd  
Port Huron, MI 48060

E-mail: [llatham@phasd.us](mailto:llatham@phasd.us)

Phone: (810) 984-2671 ext 1952

***For updates on the Spring 2015 meeting:*** Check out the MIAAPT website: [www.miaapt.org](http://www.miaapt.org).

## **MIAAPT Presentation Proposal Form: Spring 2015 Meeting**

1. Type of Presentation (*select one*):  Oral  Workshop  Poster  Favorite Demo/Puzzler

If a **workshop**, please indicate: - approximate length:  
- time constraints:

Title of presentation, maximum **10 words**:

2. Name of (Primary) Presenter:

School/Institution/Affiliation:

Address:

E-mail address:

Phone number:

3. Brief description/summary of presentation (max. 100 words). In addition, you may include names of co-presenters with their affiliations; references/citations; etc.

4. Equipment needs:

**\*\* IMPORTANT:** Presentation rooms will have computer projector systems, but presenters should bring their own laptops.