

Meeting Announcement and Call for Presentations

2013 Fall Meeting – October 11-12, 2013

Kirtland Community College

Deadline for Presentation Proposals: Friday, September 27, 2013

Are you interested in physics, physics education, or science literacy? If so, *you* are invited to the Fall 2013 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.

Featured speaker: Dr. Joseph Krajcik (Michigan State University)

Joseph Krajcik serves as director of the Institute for Collaborative Research in Education, Assessment, and Teaching Environments for Science, Technology, Engineering and Mathematics (CREATE for STEM), is a faculty member in science education at the Michigan State University, and serves as co-editor of the Journal of Research in Science Teaching. Throughout his career he has focused on improving the teaching and learning of science by designing, developing, implementing and testing innovative environments that match what is known about the how students learn. He has authored and co-authored curriculum materials, books, software and over 100 manuscripts, and makes frequent presentations at international, national and regional conferences. He served as the lead writer of the Physical Science Design Team for K-12 Framework for Science Education and as the lead writer to develop the Next Generation Science Standards. Joe is former high school chemistry and physical science teacher.



Fall 2013 MIAAPT Meeting Keynote address: Saturday, October 12, 1:00 PM

Understanding the Next Generation of Science Standards and their Implications for Teaching Physical Science and Physics

How do the Next Generation of Science Standards (NGSS) differ from previous standards? How will the NGSS impact my teaching of physics and physical science? What are the advantages and challenges associated with the NGSS? In this session, Professor Krajcik will provide responses to each of these questions. He will begin by providing an overview of NGSS and their various features. He will explain how NGSS frames standards in terms of performance expectations by blending together core disciplinary ideas, science and engineering practices, and crosscutting concepts. He will discuss the meaning of each of the dimensions – core disciplinary ideas, science and engineering practices and crosscutting concepts – as well explain the importance of developing student understanding across time. Woven throughout his remarks, he will discuss the opportunities and challenges of using performance expectations to support student learning. Joe will focus his remarks particularly on the performance expectations related to physical science, highlighting how the physical science

performance expectations emphasize some different ideas than previous standards. In particular, he will highlight the role of energy, waves and their applications, and electrical interactions. He will close by providing opportunities for questions and responses.

Meeting location: Kirtland Community College, Roscommon, Michigan

Directions to Kirtland can be found at: <http://www.kirtland.edu/directions-to-kirtland/directions-to-the-central-campus-near-roscommon> A printer-friendly campus map can be found at: <http://www.kirtland.edu/campus-map/printer-friendly-campus-map>

Information regarding some of the hotels in the area can be found below. If nature cooperates, we should be at the peak of fall color!

In Houghton Lake:

Comfort Suites Lakeside, 100 Clearview Drive, HL, 48629 989-422-4000
http://www.comfortsuites.com/hotel-houghton_lake-michigan-MI236?listpos=1

Comfort Inn, 200 Cloverleaf Lane, HL, 48629 989-422-7829
http://www.comfortinn.com/hotel-houghton_lake-michigan-MI341?listpos=2

In Grayling:

Ramada Grayling, 2650 I-75 Business, Grayling, 49738 989-348-7611
<http://www.ramada.com/hotels/michigan/grayling/ramada-grayling-conference-center/hotel-overview>

In West Branch:

Quality Inn, 2980 Cook Rd., West Branch, 48661 989-345-3503
http://www.qualityinn.com/hotel-west_branch-michigan-MI055?listpos=1

Stay tuned for the full program announcement for details about parking and lunch on Saturday.

Special Note: There will be an opportunity (weather permitting) to take advantage of the dark skies on Friday (10/11) night and observe the stars! If you have equipment that you would like to use for observing, feel free to bring it along!

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.
- **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 for Friday evening (October 11) and Saturday afternoon (October 12). 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 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, September 27](#)**. Please send it by e-mail (*highly preferred*) or “snail mail” to:

Alan Grafe
207 Murchie Science Building
303 E. Kearsley St.
Flint, MI 48502-1950

E-mail: grafe@umflint.edu
Phone: (810) 766-6632
FAX: (810) 766-6780

For updates on the Fall 2013 meeting: Check out the MIAAPT website: www.miaapt.org.

MIAAPT Presentation Proposal Form: Fall 2013 Meeting

1. Type of Presentation (*select one*): Oral Workshop Poster Favorite Demo/Puzzler
(For workshop presenters) I am available for a Friday night Saturday afternoon workshop (*select all that apply*)

If a workshop, please indicate: - approximate length and 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 and overhead projectors, but presenters should bring their own laptops.