



Call for Papers



for the **2005 Fall Meeting** of the
Michigan Section of the American Association of Physics Teachers,
to be held on
Saturday, October 15, 2005
at **Kirtland Community College in Roscommon, Michigan**

Abstract Deadline: Friday, September 30, 2005.

Invitation: We invite you to join colleagues from across the state for a day of sharing, learning, and communication as we continue the World Year of Physics at the 2005 Fall Meeting of the MIAAPT! Please share this invitation with any individual interested in physics and physics education, including teachers, staff, and students.

The featured talk of the meeting will be delivered by Paul Hickman, the current Chair of AAPT's Teacher Preparation Committee. Paul is very active with several national programs to improve science teaching and learning. His talk is entitled, "Wanted: Teachers of Physics to Empower Future Citizens and to Encourage the Next Generation of Scientists, Engineers, and Teachers".

Three workshops are scheduled at the present time:

1) **"Providing Feedback to Improve K-20 Science Instruction"**, by **Paul Hickman**. During his workshop Paul will discuss recent education scholarship that asks teachers include active-learning, inquiry and problem-solving strategies in their science instruction. (Beichner, 2004) These reform strategies have been proven to spark student interest in science, to help students, especially women and underrepresented minorities, learn more and get better grades, and lead them to enroll in advanced science courses. (Handelsman, 2004). The workshop will provide the rationale for using video of teaching and engage participants in exploratory use of classroom observation through selected video segments.,

2) **"CSI for the Physics Teacher: Reinforce Physics Concepts Using Criminalistics—A Make and Take Workshop!"**, by **Kathy Mirakovits (Portage Northern HS) and Dale Freeland (Portage Central HS)**. During this workshop Kathy and Dale will illustrate how physics is used in blood stain pattern analysis, ballistics, and the forensic analysis of glass. Attendees to the workshop will receive materials to take back to the classroom to use in teaching these concepts. This workshop is Bauder Grant funded.

3) **"The Weighty Issue of Center of Mass: Connecting Math and Science Concepts"**, by **Natalie Beyer (Grand Valley State University)**. Through guided inquiry, participants will develop a deeper understanding of center of mass and discover persistent student difficulties with this topic. The mathematical relationship between center of mass and weighted average will then be discussed in this workshop. The fun and readily available manipulatives make this a great activity for anyone. Activities are adapted from *Physics by Inquiry*, L.C. McDermott and the Physics Education Group at the University of Washington (Wiley, 1996)

The workshops will take place Saturday afternoon and we would ask you to PRE-REGISTER for these workshops by sending an e-mail to the Program Chair Kathy Mirakovits (see next page) so that presenters can plan accordingly.

A new addition to our format at this meeting will be a **poster session** during our morning break. We invite you, your colleagues and your students to present a poster.

Presentations: We encourage you to report on demonstrations, classroom experiences or current research. Have you done old things with a new twist? Have you and your students collaborated on research projects that you want to share? Have you been involved in any formal or informal research in

physics or physics education? Do you have physics insights to share, perhaps from attending a workshop or traveling to other locations?

Oral presentations are limited to 15 minutes, including questions and discussion. If you have ideas or apparatus to share that will not fit into a standard time slot or are more appropriate for a poster or demonstration setup, please let us know.

Potential presenters should submit:

- 1) **Title and brief abstract**
- 2) **Your name (including the names of any co-presenters), school or institution, address, phone number and e-mail address**
- 3) **List of any equipment needed***

*Every effort will be made to accommodate equipment needs. However any unique or special items is the responsibility of the presenter(s).

Abstracts should be submitted by post, e-mail, or FAX to:

Kathy Mirakovits
Portage Northern High School
1000 Idaho Avenue
Portage, MI 49024

E-mail: kmirakovits@portageps.org
Phone: (269) 323-5403
FAX: (269) 323-5490

Abstracts must be received by Friday, September 30, 2005, at 2:00 PM EST to merit full consideration.

My Favorite Demonstration: Do you have a unique demonstration that can be done under 5 minutes including questions and answers? If so, then please follow the format above and indicate that it is to be part of "My favorite demonstration".

Stump the Professor: Bring your favorite challenge to share and tantalize.

MIAAPT Registration: You may pre-register at our web site: <http://www.miaapt.org/>

Pre-registering enables us to estimate the number of people we expect to attend. We make lunch arrangements that are based in part on the number of people who pre-register.

MIAAPT meeting registration is \$5/meeting and may be paid at the door in October, or mailed to:

HC Snyder
MIAAPT Secretary/Treasurer
3239 Fanone
Port Huron, MI 48060-7255

Please make checks payable to MIAAPT.

Registration is free for students with valid student I.D.

MIAAPT Election:

This Fall, we are seeking a new Secretary-Treasurer. If you wish to nominate someone for this office, please contact the MIAAPT Secretary/Treasurer, HC Snyder (see above, or send an e-mail to hsnyder@sc4.edu).

MIAAPT Shirts: Shirts with the MIAAPT logo may be ordered at the meeting. Short-sleeved golf shirts and long-sleeved twill shirts are available in a variety of fabric colors, logo colors, and sizes. The golf shirts cost \$30.00 and the twill shirts cost \$25.00. Please note that some extra large sizes cost slightly more. Add \$2.50 for mail delivery. MIAAPT officers will be modeling these shirts so that you can see them for yourself!