Minutes of Fall 2006 MAP Meeting: October 21, 2006 at Mississippi State University

- The secretary and treasurer were unable to attend so there was no reading of the minutes of the previous meeting and no financial report. Dr. Croft suggested that we lease a domain for a permanent easy-to-recognize and remember URL for the MAP website. Josh Winter agreed to investigate and follow through with this project. Dr. Chris Sirola from the University of Southern Mississippi reported that USM would host the spring 2007 meeting in February or March. Nomination forms for Outstanding High School Physics Teacher were made available to attendees.
- 2. Dr. Novotny, MSU Physics department head, discussed ongoing research by faculty in the department.
 - A. Astronomy and Astrophysics: Drs. Lestrade and Pierce
 - B. Theoretical Optics: Drs. Arnoldus and Foley
 - C. Atomic and Molecular Physics: Drs. Bauman, Clay, Monts, and Wang
 - D. Nuclear Physics: Drs. Ma, Winger, Dunne, Afanasjev, and Dutta
 - E. Computational Physics: Drs. Novotny and Kim (hydrogen catalysis)

Dr. Novotny pointed out that the research was cutting-edge and involved high school, undergraduate, and graduate students.

- 3. Physics Demonstrations were presented as follows:
 - A. Paul Cuicchi: Conical pendulum, an inexpensive ballistic pendulum, and a "crash dummy-head
 - B. Josh Winter: Standing wave demonstration using sticky tape and soda straws.
 - C. Mark Worthy: Multiple uses for the PASCO Visual accelerometer and PASCO computer interface
- 4. Discussions of outreach programs, and university/community college/high school articulation were conducted. Topics covered included the annual MSU physics competition. There was concern that the date has been moved to mid-week as part of the MSU College of Arts and Sciences Academic Challenge. The tentative dates are February 9 or February 16, 2007. The concern was that there would be a drop in participation because of the mid-week format and the difficulty schools have in arranging transportation.

It was mentioned that MSU sponsors the Bettersworth Lectures where professors from various disciplines will visit high schools and present a lecture on a particular topic. These are free and can be located by going to the MSU website (www.msstate.edu) and then researching "Bettersworth Lectures".

The MSU department of Geosciences is now offering on-line courses for a master's degree in Geosciences aimed at middle school and elementary school teachers. MSU is considering offering a MS in science with an emphasis in physics and astronomy, with 18 of the 30 required credit hours to be available on-line.

- 5. Dr. Novotny then discussed the American Competitiveness Initiative. Additional information may be obtained at the American Physical Society website (www.aps.org; then click on "Policy and Advocacy" and look under "Issues.")
- 6. A tour of the MSU Engineering Research Center was conducted for MAP members by Trey Breckinridge.
- 7. Lunch followed at the Bulldog Deli where the discussions included suggestions about how to increase the attendance at future MAP meetings. There was agreement that an e-mail follow-up should have been sent to physics teachers at all levels in addition to the meeting announcement mailed-out in late August,