

September 2009 No. 080



### **NEWSLETTER**

# FALL MEETING

Joint with MidSouth Chapter-Acoustical Society of America



MEETING AGENDA, 30-31 OCTOBER 2009

# University of Mississippi, Oxford, MS

# Friday, October 30th

- 1:00 2:00PM : Meeting Registration
- 2:00 5:00PM : Opening Sessions
- 5:30 7:00PM : Social in downtown Oxford, MS
- 7:00 8:00PM : Physics Department Halloween Demo Session

# Saturday, October 31st

- 7:30 8:30AM : Coffee & Donuts at NCPA
- 8:30 9:30AM : Poster Sessions
- 9:30 11:00AM : Morning Sessions
- 11:00 11:15AM : Break
- 11:15 12:00AM : Closing Session
- 12:00 1:30PM : MAP Business Meeting
  - Treasurer's Report
  - Executive Board Meeting

# PRESIDENT'S MESSAGE

The Fall meeting of the Mississippi Association of Physicists (MAP), also known as the Mississippi Section of the American Association of Physics Teachers, will be held 30-31 October at the University of Mississippi.



MAP will join the MidSouth Chapter of the Acoustical Society of America for this meeting. The MidSouth Chapter is newly formed and more information on the Chapter can be found at http://www.acosoc.org/RegChapters/MidSouth/. One of the goals of the Chapter is acoustics education outreach.

At the joint Fall MAP and MidSouth Chapter meeting, we are planning a series of general audience talks on auditorium acoustics, loudspeakers for everyone, and home theater systems. We are interested in talks on topics in sound or vibration from high school and two- and four-year college and university faculty and students. Either contact me (Sabatier@olemiss.edu) or go to the web sites to register for the meeting or to submit a paper title and abstract.

Since the meeting is on the University of Mississippi campus, we expect to have acoustic presentations by faculty and students from the Department of Physics and Astronomy and the School of Engineering in addition to the National Center for Physical Acoustics. These talks will offer overviews of the acoustic research endeavors in respective departments.

MAP will have its business meeting at noon on Saturday. On behalf of our organization, I have invited the physics faculty from the two-year colleges and high schools to explore ways that MAP can help facilitate its education goals with these institutions. George Nock at Northeast Mississippi Community College has led the two-year college (TYC) effort. He has been in contact with most of the TYC faculty and is helping with TYC college information for the newsletter and web page. I have had preliminary conversations with faculty at the Mississippi School for Math and Science, but we still need HS faculty to help get this effort off the ground. Any volunteers should contact me.

For the third consecutive year, the Department of Physics and Astronomy at the University of Mississippi will host "Spooky Physics Demonstrations" on Friday, October 30th. The event, which will be free and open to the public, will also include treats and fun, featuring a Halloween costume contest for youngsters. For more information, see <a href="http://picasaweb.google.com/baishaliroy/HalloweenPhysicsNight#">http://picasaweb.google.com/baishaliroy/HalloweenPhysicsNight#</a>.

Mississippi State University announced the retirement of Dr. Sandra Harpole this past summer. Dr. Harpole has been a longtime supporter of MAP and serves as MAPs representative to the AAPT. Sandra has had a tremendous impact on physics education in our state. She conducted many summer workshops for science teachers at all grade levels, leading an effort that partners industry with education, bridging the gap between the classroom and the workplace, and

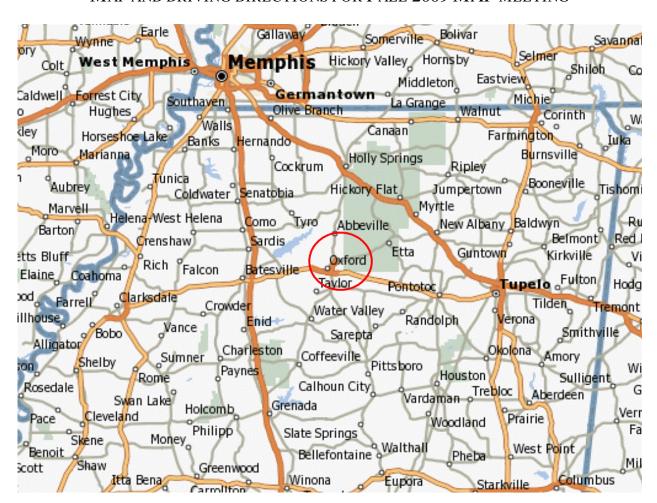
improving the knowledge and skill base of tomorrows' workforce. Her efforts have influenced the teaching of science teachers all across the state. Sandra tells me that she plans to at least attend the MAP meeting on Friday is and is hopeful for Saturday; so, I invite all of her friends to join her at the Fall MAP meeting.

The meeting information, including driving directions and hotel information, can be found in this newsletter and on the MAP web page at <a href="www.msphysics.org">www.msphysics.org</a> or the MidSouth Chapter web page at <a href="www.acosoc.org/RegChapters/MidSouth">www.acosoc.org/RegChapters/MidSouth</a>. Be sure to visit these web sites to get the latest news about the Fall 2009 meeting.

### HOTEL INFORMATION FOR FALL 2008 MAP MEETING

A listing of hotels may be found at <a href="http://oxford.mississippi.com/hotels.html">http://oxford.mississippi.com/hotels.html</a>.

# MAP AND DRIVING DIRECTIONS FOR FALL 2009 MAP MEETING



## **NEWS AND UPDATES**

## Two Year Colleges

Kevin McKone at Copiah Lincoln Community College has been working with Mehri Fadavi at Jackson State University on cross-over training for high school teachers in the physical sciences area. At Co-Lin, Kevin has been doing outreach for upper elementary and junior high teachers. This includes a summer science camp and science shows for younger students. (http://www.jugglemania.com/)

# Mississippi State University

The last months have seen a number of changes in personnel at MSU. Jim Dunne was promoted to Full Professor. Professor John Foley retired after a thirty year career in the Department. Professor Sandra Harpole, who had been serving as the Associate Vice President for Research, retired. The Department is beginning a search for a tenure-track Assistant Professor to begin Fall 2010, as well as for a part-time instructor to begin Fall 2010. The Department also has an open Visiting Assistant Professor position for January 2010.

### University of Mississippi

The National Science Foundation has awarded a grant to University of Mississippi for support of the project, entitled "Gravitational waves from black hole binaries: modeling, astrophysics and strong-field tests," under the direction of Dr. Emanuele Berti.

Dr. Don Summers and Tech-X of Boulder Colorado have received a phase II SBIR award to study, "Muon Cooling in a Transverse Cyclotron" carrying on the rich tradition of accelerator physics at the University of Mississippi.

The physics department has recently applied for a NIST grant to double the size of the Lewis Hall Research wing.

Dr. Alakbaba Datta gave an invited plenary talk on "CP violation" at the recent APS Division of Particles and Fields meeting in Detroit.

Dr. Rich Raspet hosted 3 brilliant summer students at the NCPA who performed important research on "Effects of Wind Screening on Point Detection Arrays" and "Study of Seed Ballistics and Spin Ratios".

Dr. Gladden has been awarded grants from the Jet Propulsion Lab to study thermoelectric materials at high temperatures.

Dr. Bombelli is returning from sabbatical leave in Spain. He gave talks at conferences in Italy and France on "From Quantum Mechanics through Complexity to Spacetime".

Dr. Ostrovski recently received a US Patent for "Multidomain Plate Acoustic Wave Devices.", a subject of Victor Klymko's dissertation.

Drs. Mobley and Labuda continue their research in High Intensity Focused Ultrasound (HIFU) for hemostasis in large vessels, evaluation of HIFU thermal dose, ultrasonic methods for head trauma assessment, and propagation in phononic materials.

Emeritus Professor Jim Reidy is working as a project monitor at the NSF in FY10.

With the stepping down of Professor Tom Marshall as the 12-year chair of the Department of Physics and Astronomy, Dr. Lucien Cremaldi has recently assumed the role.

### SPRING 2010 MEETING

Mark your calendars for the Spring 2010 meeting, which will be held at Mississippi State University on 26-27 March 2010. This meeting will mark the 40<sup>th</sup> anniversary of the MAP organizational meeting held at MSU in 1970. The agenda for this meeting has not yet been established, but may include tours of some of the aerospace industries in the "Golden Triangle Area".

#### MAILING LIST

MAP has started a mailing list on Google Groups. Invitations were sent out, however, if you did not receive one, you can go to <u>the Google Groups page</u> and request to join. Google Groups is free, easy, safe, and spam free.



#### **About AAPT**

AAPT was established in 1930 with the fundamental goal of ensuring the "dissemination of knowledge of physics, particularly by way of teaching." We currently have more than 10,500 members in 30 countries around the world.

<u>Annual Meetings</u> in winter and summer provide our members with the opportunity to network, discuss innovations in teaching methods, and share the results of research about teaching and learning. In addition to these meetings, we host or support smaller <u>workshops and conferences</u> and <u>symposia</u> throughout the year to provide further opportunities for professional development and knowledge sharing.

We also publish two major peer-reviewed journals, the <u>American Journal of Physics</u> and <u>The Physics Teacher</u>. These journals provide a medium for sharing methods and research about teaching physics at introductory and advanced levels. In 2007, we launched a new general-interest magazine, <u>Interactions Across Physics and Education</u>. All AAPT members receive <u>Interactions</u> and their choice of one of the journals as part of their <u>membership</u>.

We also participate in or sponsors many <u>projects</u> related to improving the teaching of physics. And we offer <u>awards and grants</u> for educators and we sponsor or participate in many <u>contests and competitions</u> for physics students.

The Summer AAPT meeting will be held July 19-23 in Edmonton, Alberta.

For more information about joining AAPT, go to <a href="http://www.aapt.org">http://www.aapt.org</a>.

The above information is reprinted from the AAPT website.

# Mississippi Association of Physicists

http://msphysics.org

The Mississippi Association of Physicists (MAP) was established in 1970. It is the Mississippi Section of the American Association of Physics Teachers. Its goals are:

- •To provide an opportunity for the physicists of the state and physics and physical science teachers to get to know their colleagues at other institutions.
- To provide a means for greater cooperation among the physics departments in the universities, colleges, junior colleges, and high schools in promoting teaching and research.
- •To provide a better program of consultation between the universities, colleges, junior colleges, and high schools.
- •To provide a cooperative effort among all universities, colleges, junior colleges, and high schools to strengthen the teaching of physics at all levels.
- •To improve the public understanding of science.

Membership is open to all people interested in promoting physics. Teachers, professors, and industrial physicists are encouraged to join. Annual membership dues are \$5.00. MAP meetings are held semiannually.

# **MAP Membership Application**

Please print or type
Name:
Last First Middle/Maiden Address:
Street/P.O.Box Apt.#
City, State Zip
Phone Number: (circle one: work or home) Email address: Institution:
Job Title/Area of Certification:
Number of Years Experience: Are you a member of AAPT?

Send the completed membership application and a check or money order of \$5 for membership dues to:

Willie Newell, MAP Treasurer Jones County Junior College 900 South Court Street Ellisville, MS 39437 MAP Officers

# President

James M. Sabatier, UM

### **Vice President**

Manaf Ali, NWMCC

# **Secretary**

Dennis Reed, MSMS

### **Treasurer**

Willie Newell, JCJC

# 4 year institutions: 4 members

- 1. Mark Novotny, MSU (2010)
- 2. James Sabatier, UM (2009)
- 3. Carlysle Meek, DSU (2010)
- 4. Quinton Williams, JSU (2010)

# **Community colleges: 3 members**

- 1. Kevin McKone, CoLin CC (2010)
- 2. Mary Boleware, JCJC(2009)
- 3. George Nock, NEMCC (2010)

# **HS: 4 members**

- 1. Dennis Reed, MSMS (2010)
- 2. Tommy Sumrall, Forrest County AHS (2009)
- 3. Kris Sahu, Ridgeland HS (2010)
- 4. Susanna Stewart, Vicksburg Warren Central HS (2010)

# **At-Large: 2 members**

- 1. Vacant (2010)
- 2. Manaf Ali, NWMCC (2009)