

# *Mississippi Association of Physicists*

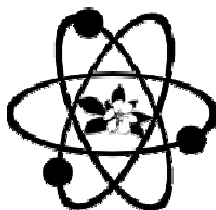


*The Mississippi Section of the  
American Association of  
Physics Teachers*

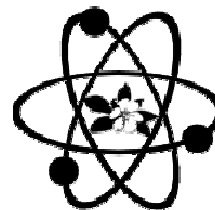
November 2008

No. 079

## NEWSLETTER



## FALL MEETING



**Meeting Agenda, Saturday 8 November 2008.**

**Red Hills Mine, Ackerman, MS**

0830 - 0900	Registration
0855 - 0900	Welcome
0900 - 1100	Mike Thomas and Staff, Red Hills Mine: Lecture and Tours
1115 - 1200	“Physics of Nuclear Power,” Professor John Meriwether
1200 - 1300	Lunch, Red Hills Mine (Executive Board Meets)
1300 - 1330	Meeting MAP physics education goal: The AAPT perspective, discussion.
1330 - 1345	Business Meeting: Minutes and Treasurer’s Report
1345 - 1500	Other talks and discussions
1500	Adjourn

## 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 8 November at the Red Hills Mine near Ackerman, MS. At the Spring 2008 meeting, we toured the Grand Gulf Nuclear Station and the reactor control simulator. The theme of the Fall meeting will also be energy. Our venue for this meeting is the Mississippi Lignite Mining Company, which was formed in 1997 to supply lignite coal to the Red Hills Power Plant. The Company is an affiliate of The North American Coal Corporation, the largest lignite producer in the United States. North American Coal and its affiliates operate 6 lignite surface mines producing over 33 million tons annually and also provide dragline services for limestone quarries in South Florida. The Red Hills Power Plant, which supplies electricity to Tennessee Valley Authority under a 30-year contract agreement, is owned and operated by Choctaw Generation, LLP, an affiliate of Tractebel Electricity and Gas International. Construction of Red Hills Mine and facilities began in August 1998. Development of the initial boxcut began in April 1999, and the first lignite was mined in December 1999.



Our host will be Mr. Mike Thomas; he and his engineers will provide us with an overview of the coal mine facility and power plant. This will be followed by tours of both facilities. Dr. John Meriwether from the Physics Department at the University of Louisiana-Lafayette will present a lecture on the physics of nuclear power. I hope that you can join us for this important and informative meeting.

On behalf of our organization, I have invited the physics faculty from the two-year colleges to present an overview of the physics academic component at their respective institutions. Also, Sandra Harpole and I will present views on MAP's potential contributions to high school physics education from our AAPT perspectives. From these talks, MAP will continue to develop a vision for physics education in the state.

The meeting information, including driving directions and hotel information, can be found in this newsletter and on the MAP web page at [www.msphysics.org](http://www.msphysics.org). Be sure to go there to get the latest news about the Fall 2008 meeting. Since there are no local restaurants in near the meeting location, we are planning a catered bar-b-q lunch (<\$10) at the Red Hills Mine facility. Please RSVP your attendance to [sabatier@olemiss.edu](mailto:sabatier@olemiss.edu).

## Hotel Information for Fall 2008 MAP meeting

There are several motels near the Red Hills Mine. These include the following:

### **Best Western Red Hills Inn**

201 Hwy 15 North  
Louisville, MS 39339  
662-773-9090

### **Days Inn**

Hwy 15 North  
Louisville, MS 39339  
662-773-4005

### **Comfort Suites (Smoke-Free)**

801 Russell St.  
Starkville, MS 39759  
662-324-9595

### **Hampton Inn**

Hwy 12 East  
Starkville, MS 39759  
662-324-1333

### **Holiday Inn Express (Smoke-Free)**

110 Hwy 12 West  
Starkville, MS 39759  
662-324-0076  
662-324-9428

### **Hotel Chester**

101 N. Jackson Street  
Starkville, MS 39759  
662-323-5005

### **Days Inn & Suites**

119 Hwy 12 W.  
Starkville, MS 39735  
662-324-5555

## Map and driving directions for Fall 2008 MAP meeting



Red Hill Mine link: <http://www.nacoal.com/operations/redhills.html>

## News and Updates

### *University of Mississippi*

A number of professors at the University of Mississippi were looking forward to the turn on of the Large Hadron Collider at CERN, where they are performing experiments to search for Higgs bosons, dark matter, and other exotic states at these new and high energies. The program has been delayed for 6 months due to a fault in the accelerator superconducting magnets train. Dr. Lucien Cremaldi and Dr. David Sanders recently visited CERN, where they heard the news first hand.

### *Rainwater Observatory News*

Rainwater Observatory near French Camp has added a .65-meter Ritchey-Chretien research telescope. The telescope is housed in a 6-meter automated dome and operated from a heated/air-conditioned control room. Rainwater is located in one of the six dark sky sites east of the Mississippi River.

Instrumentation includes an SBIG 1001 CCD camera, a Mallincam integrating video camera, an SBIG 402 self guiding spectroscope, and a 10 megapixel digital SLR modified for astrophotography. It can also be used visually and has an AstroPhysics refractor attached.

The facility is available for use by students, teachers, and amateur astronomers as part of the Los Cumbres Global Telescope Network. A guest bunk room and showers are available, as are 14 other telescopes, including the largest in the state, a 32 inch. For more information or to schedule a visit, call Jim Hill at 662-547-6377 or from the web site at <http://rainwaterobservatory.org>

## **Spring 2008 MAP Minutes**

### **April 5 2008**

The Mississippi Association of Physicists (MAP) held the Spring 2008 at the Grand Gulf Nuclear Station (GGNS) in Port Gibson, Mississippi. Registration began at 8:30 am. At 9:00 AM President James Sabatier called the meeting to order and provided a welcome to the MAP membership. After a brief introduction he turned the meeting over to Mr. Jim Carry and Mr. Walter Cade.

Walter Cade, GGNS Operation Manager, and Jim Carry, Training & Development Manager, provided an overview of the GGNS and plans for several new Entergy nuclear power units in both Mississippi and Texas in addition to the local security regulations. Mr. Carry exhorted the need for 1200 new nuclear power employees, many of which are engineers and technicians, emphasizing MAP's role as physics educators. The membership was then escorted to the GGNS simulator training facility. Here the power plant control panel was demonstrated and several emergency procedures were demonstrated.

Following this, the President introduced the next phase of the meeting to address and discern MAP goals and tasks to implement these goals. The Physics Department Chairs from the four public universities provided an overview of their respective departments' teaching and research programs to initiate discussion. The Chairs and/or their representatives were Professors Quinton Williams, JSU, Khin Maung, USM, Lucien Cremaldi, UM, and Sandra Harpole, MSU. There was discussion regarding how many of the educational activities presented could be fostered throughout the state via MAP's membership, newsletter and web page.

The President presented MAP goals from the Constitution and Newsletter. It was decided to post these on the MAP web page and add links to various happenings at the universities, TYC, and HS. Links to [www.msphysics.org](http://www.msphysics.org) will also be accomplished. Ken Wester of MSMS indicated that MAP's involvement with MSTA did meet many needs of the high school teachers, but holding meetings at MSTA resulted in a loss of university faculty involvement in MAP. In a note to the President, Marsha Hobbs, an AAPT PTRA representative, indicated she would offer workshops via MAP meetings, but the most recent workshop series resulted in cancellation of the third in the series due to low registration numbers. The President reminded the membership that MAP could serve as a teacher workshop follow-up meeting day that is often required in NSF, DoE and IHL grants and had served in this capacity many times in the past. Dr. Cremaldi indicated he had a group of QuarkNet teachers at the current meeting and these included Ken Wester, Dennis Reed, and Kris Sahu.

The Executive Board meeting was held during lunch. Thanks to the help of Walter Cade, the membership enjoyed a chicken and rib BBQ meal during discussions. The main topic of discussion was the Fall and Spring MAP meeting. The Board decided to pursue the Red Hills Mine facility for the Fall 2008 meeting. The local point of contact for this meeting is Mr. Mike Thomas. Several options fall the Spring 2009 meeting included Griffin Industries in West Point, American Eurocopter and Aurora Flight Sciences in Columbus, and Howard Industries in Laurel.

Following the Executive Board meeting, the membership approved a change in the institutional dues for the 4-year universities and 2-year colleges from \$50 and \$15 to \$300 and \$50, respectively. It was decided to leave the individual dues the same. No action was taken on 4-year colleges or associate member dues. Dr. Khin Maung suggested that MAP reach out to the 4-year private colleges through faculty seminars and a MAP brochure and that the MAP membership application form be mailed to Departmental Chairs so they can encourage faculty to join the organization.

Next, the membership proceeded to the Spring 2008 elections. The President referred to the MAP Constitution to explain errors that have been occurring in this election process dating as far back as the archival minutes could be discovered. As a result of these errors and in the spring of 2008, the President appointed several members to fill vacancies on the Board, as allowed by the Constitution in these instances. These changes and newly elected Board members and officers are indicated below.

- **4 year institutions: 4 members**

- 1. Mark Novotny, MSU (2010) elected to Board 5 April 2008 GGNP meeting
- 2. James Sabatier, UM (2009) re-elected President 5 April GGNP meeting
- 3. Carlyle Meek, DSU (2010) appointed to Board by Sabatier 01 March 2008
- 4. Quinton Williams, JSU (2010) elected to Board 5 April 2008 GGNP meeting

- **TYC: 3 members**

- 1. Kevin McKone, CoLin CC (2010) re-elected to Board 5 April GGNP meeting
- 2. Mary Boleware, JCJC(2009)
- 3. George Nock, NEMCC (2010) appointed to Board by Sabatier 01 March 2008.

- **HS: 4 members**

- 1. Dennis Reed, MSMS (2010) elected to Board 5 April GGNP meeting, elected Secretary same day
- 2. Tommy Sumrall, Forrest County AHS (2009)
- 3. Kris Sahu, Ridgeland HS (2010) appointed to Board by President 01 March 2008
- 4. Susanna Stewart, Vicksburg Warren Central HS (2010) elected to board 5 April GGNP meeting.

- **At-Large: 2 members**

- 1. Vacant (2010)
- 2. Manaf Ali, NWMCC (2009) elected Vice President 5 April 2008, GGNP meeting

The meeting was adjourned at approximately 2:00PM.



American Association of Physics Teachers

## 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.

[Annual Meetings](#) 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 [workshops and conferences](#) and [symposia](#) throughout the year to provide further opportunities for professional development and knowledge sharing.

We also publish two major peer-reviewed journals, the *[American Journal of Physics](#)* and *[The Physics Teacher](#)*. 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, *[Interactions Across Physics and Education](#)*. All AAPT members receive *Interactions* and their choice of one of the journals as part of their [membership](#).

We also participate in or sponsors many [projects](#) related to improving the teaching of physics. And we offer [awards and grants](#) for educators and we sponsor or participate in many [contests and competitions](#) for physics students.

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

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

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. Carlisle 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)