

***SPRING NEWSLETTER
OF THE
SOUTHEASTERN SECTION
OF THE
AMERICAN PHYSICAL SOCIETY***

May 15, 2011

A LETTER FROM THE CHAIR

First of all, I'd like to thank the previous SESAPS Chair, Paul Cottle of Florida State University, for the contributions he made to the vitality of the section. He was instrumental in keeping our focus on the importance of students to the SESAPS mission as well as in efforts to put the awards that SESAPS presents onto a firmer financial footing.

The 78th SESAPS Annual Meeting will be held at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, October 19-22. Section Chair-Elect Roxanne Springer of Duke University is serving as Program Chair for the meeting. Contact her with your ideas for scientific sessions and invited speakers. We are looking forward to a vigorous meeting that reflects the broad excellence of the physics research effort in the southeast.

The 77th Annual Meeting, held at Louisiana State University in Baton Rouge, October 20-23, demonstrated that the SESAPS meeting program continues to be strong. Joe Giaime of LSU organized a very successful meeting, and many of the participants enjoyed a special tour of the LIGO Livingston Observatory. Due to a fortuitous coincidence of the meeting dates with a shutdown of the facility for an upgrade, we received an unprecedented "inside look" at this amazing apparatus. The social climax of the meeting was the banquet on Friday evening where the section presented its annual awards. The Jessie W. Beams Award for excellence in research was given to Beate Schmittman of Virginia Tech, and Amer Lahamer of Berea College received the George B. Pegram Award for excellence in teaching. The Francis Slack Award for excellence in service to the physics community was given to Florida State's Kirby Kemper. After dinner the attendees heard an address by Kate Kirby, Executive Officer of the APS, which included a lively account of APS's experiences at ComicCon, a convention for fans of comic books. Apparently the comic books produced by the APS Education & Outreach division were a huge hit there!

I would like to welcome our new Vice Chair, Richard Haglund of Vanderbilt University and the new At-Large Member, Michel Pleimling of Virginia Tech, to the Executive Committee.

I would also like to thank David Ernst of Vanderbilt University for his four years of service in the SESAPS Chair Line. His leadership in the areas of research and education set an example for us all.

In closing, I'd like to emphasize the importance of membership in SESAPS, which costs nothing if you are already an APS member. Coax your colleagues into joining – it will help us maintain our role in the national APS organization.

Sincerely,

Laurie McNeil

Professor of Physics
University of North Carolina at Chapel Hill

A MESSAGE FROM THE MEMBERSHIP COORDINATOR

Dear SESAPS Members:

As membership coordinator of the Southeastern Section, I am asking all SESAPS members to encourage fellow members of the APS in the Southeast who are not yet members of the SESAPS (there are ~2500 of them!) to seriously consider joining SESAPS. In particular, please discuss the issue of SESAPS membership with your undergraduate and graduate students and, in one of your departmental faculty meetings, publicize SESAPS and its activities more widely. *This is especially true of any new institutions that have recently joined or plan to join SESAPS in the near future. It does no good to join as an institution if your students and faculty do not join as individuals.*

It is especially important to encourage your graduate and undergraduate students to join the APS and SESAPS in this time of economic stress. *The data seems to show that after years of steady growth since 2001, in the past two years the enrollment in SESAPS has shown a small decrease in both years while most of the other sections have shown increases ranging from substantial to small.* We are still the largest section in the country but like the other sections we are feeling the effect of the economy. It is important for the health of APS and of SESAPS that we encourage our younger people to enroll and, just as importantly, to maintain their membership in their professional society

Undergraduate students who join the Society of Physics Students (SPS) at

<http://www.spsnational.org/about/benefits.htm> are entitled, for as long as they are undergraduates, to free membership in one member society of the American Institute of Physics. Please encourage your students to join the SPS, and then to pick the APS as their AIP member society. Graduate students who join the APS obtain free membership for their first year and membership at reduced cost for later years as long as they are a student.

Undergraduate, graduate student, or faculty members, who presently live in the Southeast and who are members of the APS or become a member of the APS can immediately join the SESAPS *at no additional cost*. This is easy to do, simply follow the link to the APS webpage (<https://www.aps.org/aps-login/index.cfm>). You can also visit the SESAPS webpage at <http://www.aps.org/units/sesaps/index.cfm> to find out more about SESAPS activities.

There are several advantages to becoming a member of SESAPS, and no disadvantages. SESAPS members have a reduced registration fee at our annual meeting. Membership is also a way to become more actively involved in issues which affect everyone in our region.

There were 2680 SESAPS members as given on May 10, 2011 down from 2731 in 2009. While SESAPS continues to be the largest APS section, we need to be especially diligent in this time of stress in order not to lose membership. We ask your help to encourage the members of your departments to join us in this vibrant organization. If you have any questions about membership in SESAPS, please feel free to contact me.

Brad Cox
University of Virginia
Membership Coordinator, SESAPS
cox@uvahep.phys.virginia.edu

The 78th Annual Meeting of the Southeastern Section of the American Physical Society (SESAPS 2011).

The next annual meeting of SESAPS, to be hosted by Virginia Polytechnic Institute and State University, will be held in Blacksburg, VA, Wednesday, October 19, 2011 – Saturday, October 22, 2011.

THIS IS THE FIRST CALL FOR ABSTRACTS OF CONTRIBUTED PAPERS.

SESAPS will use electronically submitted abstracts. All abstracts of contributed papers must be prepared in the standard APS format as specified in recent issues of the APS News. The abstract deadline is **5 PM on Wednesday, August 24, 2011**. The program will be available electronically, and printed copies will be available at the meeting for all who register.

The scheduled time for your presentation must be obtained from the bulletin *that will be available electronically* on the web. Meeting rooms will have an overhead projector and facilities for projections from a computer. To request other audio-visual aids, including chalkboards or 35 mm projectors, please make your request in writing by typing it in the special instructions box of the abstract template. Any questions about the program should be directed to Dr. Roxanne Springer rps@phy.duke.edu.

CONTRIBUTED/INVITED PAPERS: Invited papers at this meeting, as in all APS meetings, are given by experts in areas selected by the Program Committee, and these talks are usually of thirty minutes duration. Contributed papers, however, are on topics of the author's choice and are ten minutes in length. On the day following the abstract deadline, all papers are organized into sessions and the sessions into the program of the meeting. Some of the contributed abstracts are of such interest that the committee will *invite the authors* to give a *special paper* of twenty minutes duration on the topic of their abstract at the beginning of the contributed paper session to which their talk is assigned. There will only be a few such papers selected. The invitations will be listed in the printed program of the meeting and will be verified promptly by electronic or regular mail to the authors. If the author(s) would like to be considered for such an invitation, they are asked to type the following statement in the special instructions box: If invited to do so, the author is willing to expand the talk for the above abstract to twenty minutes.

A MEETING OF THE SOCIETY OF PHYSICS STUDENTS will be held in conjunction with the SESAPS meeting and will include a student paper session where the Marsh W. White Award will be presented for the best paper given at that session. More information will be provided in the Summer Newsletter.

TRAVEL SUPPORT WILL BE AVAILABLE FOR STUDENTS THIS YEAR: Students will be pleased to learn that modest travel grants will again be available for those presenting research papers at the SESAPS sessions. Students giving papers in the SPS sessions only are not eligible for travel support. An application is included in this newsletter and is also available on the SESAPS website.

SUGGESTED NOMINATIONS FOR SECTION OFFICERS should be sent to Dr. Richard Haglund Richard.Haglund@Vanderbilt.edu at the address given at the end of this newsletter. All suggestions will be considered seriously by the Nominating Committee, which is composed of the members of the Executive Committee. The positions available are Vice Chair and Member-At-Large (a three year term).

CONGRATULATIONS TO THE FALL 2010 ELECTION WINNERS.

SESAPS Vice-Chair is Richard Haglund of Vanderbilt University.
SESAPS Member-At-Large is Michel Pleimling of Virginia Tech.

AWARD NOMINATIONS

Your help is sought in advertising the upcoming deadline for annual nominations for the three SESAPS awards. The deadline for nominations for SESAPS awards is **August 5, 2011**. These awards will be presented at our Annual Meeting in November.

The **Jesse W. Beams Award** recognizes especially significant or meritorious research in physics, the major portion of which was carried out in the ten-state SESAPS region in the Southeast. The **George B. Pegram Award** honors someone with a career of "Excellence in the Teaching of Physics in the Southeast." The **Francis G. Slack Award** honors persons who have during their career exhibited "Excellence in Service to Physics in the Southeast."

The required nomination materials consist of a CV, a nominating letter and up to three supporting letters (a maximum of two pages each). One of the letters should be from an institution other than the nominee's home institution. No other supporting documents are needed, but may be included. If at all possible, the entire nomination should be sent in the form of a single pdf file to the Award Committee Chair. If electronic submission is not possible, then four copies of the nomination materials should be sent. The nominator is also asked to notify the Chair (Laurie McNeil) and Vice Chair (Richard Haglund) of the Section by email informing them of the submission. Nominations will be considered active for three years; updating materials for nominees not chosen in the prior year is encouraged.

Slack Award committee*Chair:*

Lee L. Riedinger
 Dept. of Physics
 The University of Tennessee
 Knoxville, TN 37996-1200
 Phone: 865-719-4898
 Fax: 865-974-7843
lrieding@utk.edu

Previous winner:

Kirby Kemper
 Dept. of Physics
 Florida State University
 Tallahassee, FL 32306-4350
 Phone: (850) 644-2867
 Fax: (850) 644-8630
kirby@nucott.physics.fsu.edu
kkemper@research.fsu.edu

3rd member:

Kathy Whatley, Provost
 Berry College
 2277 Martha Berry Hwy NW
 Mount Berry, GA 30149
 Phone: (706) 236-2216
kwhatley@berry.edu

Pegram Award Committee*Chair:*

David Haase
 Dept. of Physics
 Campus Box 8202
 North Carolina State Univ.
 Raleigh, NC 27695-8202
 Phone: (919) 513-7023
 Fax: (919) 513-7545
david_haase@ncsu.edu

Previous winner:

Amer Lahamer
 Dept. of Physics
 Berea College
 CPO 1872
 Berea, KY 40404
 Phone: (859) 985-3277
 Fax: (859) 985-3303
lahamera@bera.edu

3rd member:

Alice Churukian
 Dept. of Physics and Astro.
 Phillips Hall CB #3255
 Univ. of North Carolina at
 Chapel Hill
 Chapel Hill, NC 27599-3255
 Phone: (919) 962-5001
 Fax: (919) 962-0480
adchuruk@physics.unc.edu

Beams Award Committee*Chair:*

Laura Reina
 Department of Physics
 Florida State University
 510 Keen Building
 Tallahassee, FL 32306-4350
 Phone: (850) 644-9282
 Fax: (850) 644-6735
reina@hep.fsu.edu

Previous winner:

Beate Schmittmann
 Virginia Polytechnic Institute
 & State University
 Physics Department
 Robeson Hall (0435)
 Blacksburg, VA 24061
 Phone: (540) 231-6544
 Fax: (540) 231-7511
schmittm@vt.edu

3rd member:

Larry Cardman
 Nuclear Physics Div.
 12000 Jefferson Avenue,
 Newport News, VA 23606
 Phone: (757) 269-7032
 Fax: (757) 269-7363
cardman@jlab.org

More information about the submission of Awards nominations can be found at
<http://www.aps.org/units/sesaps/awards/index.cfm>

BEAMS, PEGRAM, AND SLACK AWARD DONATIONS

Each year, the Southeastern Section presents three awards, the Jesse W. Beams Award for excellence in research, the George B. Pegram Award for excellence in teaching, and the Francis Slack Award for excellence in service. These awards have been largely funded by donations from members. We express our gratitude to the following departments and individuals who have made recent donations to the Pegram, Beams, and Slack award funds. The funds are now on a much more solid financial footing for the long term than they have been in previous years.

Duke University Department of Physics

University of North Carolina at Chapel Hill Department of Physics and Astronomy

University of Tennessee Knoxville Department of Physics and Astronomy

University of Virginia Department of Physics

Vanderbilt University Department of Physics and Astronomy

Hui-Yiing Chang

David Ernst

Leonard Feldman

R. F. Haglund, Jr.

Joseph Hamilton

Shane Hutson

Ernest Jones

Hadley Lawler

A. V. Ramaya

Kenneth Schriver

Norman Tolk

Julia Velkovska

If you would like to contribute to the Beams, Pegram, or Slack Funds, send the information listed below with your check (made out to SESAPS) to Dr. John Shriner, SESAPS Treasurer, Department of

Physics, Box 5051, Tennessee Technological University, Cookeville, TN 38505. Dr. Shriner will also accept contributions at the SESAPS meeting. Thank you for your continuing support of these awards.

Information needed: Name, total amount of donation, amount to be credited to each award fund (Beams, Pegram, and Slack). Donations to individual funds, or to be split among two or more funds, are welcome.

**Minutes of the SESAPS Executive Committee Meeting
October 22, 2010
B. Cox, SESAPS Secretary**

1. The meeting was called to order by the SESAPS Chair Paul Cottle who invited Dr. Kate Kirby, APS executive officer to lead a discussion of the national APS issues. The discussion revolved around outreach activities. Dr. Kirby characterized as critical the role of the APS sections including SESAPS in outreach to young people and to minorities. Dr. Kirby reported on the proposal for the Minority Bridge initiative to increase the percentage of underrepresented minorities with PhDs in physics.

Dr. Kirby also covered many other topics, among which were the success of the PhysTEC program, Laser Fest celebrating the 50th anniversary of the laser, and prospects for renewal of the America Competes legislation, which proposes to double the funding for science research over 10 years. She emphasized that it will be a hard fight given the present state of the budget deficit but that it was possible and normally receives bipartisan support.

Finally, Dr. Kirby indicated that the APS was poised as of the first of the year to help the Sections hold their meetings by taking over the registration including registration by credit card. This was much appreciated.

2. Ted Hodapp and Peter Muhoro were also welcomed as guests at the executive committee meeting and elaborated on the minority outreach programs. Dr. Hodapp emphasized the critical role of SESAPS since a large percentage of underrepresented minorities in physics live in the Southeast.

He also described the Society for Advancement of Chicanos and Native Americans in Science organization (SACNAS) and their recent national meeting. He suggested that SESAPS consider running a future SESAPS meeting in conjunction with a SACNAS meeting. The SACNAS meeting is very large compared to a SESAPS meeting so this posed a problem but would be considered. Chair elect, Laurie McNeil, agreed to look into it by contacting J.D. Garcia, chair of the organization.

3. Ron Mickens once again brought up the issue of archiving the records of SESAPS. The issue has been the electronic nature of the majority of the records. Ron emphasized that the Niels Bohr Institute archivists want original product, not just minutes or bulletins. They desire e-mails, and other more informal information. They are willing to accept electronic versions and it is up to the Chairs of the Section to see that their tenures are adequately archived.

4. There was an extensive discussion of the Beams, Pegram, and Slack awards. There was a proposal that the Slack award might be best given every two years. The Pegram and Slack awards suffer from a small number of nominations (but not the quality of the nominations) whereas the Beams award has an adequate number.

In addition, David Haase brought up some rewordings of the Pegram award description (for the record, I have included David Hasses' original Proposal at the end of the minutes below). The executive committee unanimously endorsed these.

There was a discussion of the awards committees' structure. A number of changes were suggested to help the committees, including that it be made explicit that the one member from the previous year's committee should remain in the following year's committee and serve as chair.

A second set of changes had to do with specifying the materials to be provided to the committees to help them in their work:

1. At least one of the supporting letters be from other than the nominee's home institution.
2. A CV be provided for the candidate
3. To the sentence in the Nomination information that presently reads

“No other supporting documents are needed.”

add the phrase “but may be included”.

4. Rather than asking four separate paper copies, ask that all nomination material be provided as a single PDF to the committee chair.

Finally, a major new responsibility was added to the committee's role. They will now be asked to solicit nominations.

As a last item, the role of the SESAPS vice chair (who is an ex-officio member of each committee) was clarified. The Vice chair is charged with oversight of the committees to see that the work is done in a timely manner and is accomplished in adequate time so that the SESAPS secretary can prepare the citations and the award medals.

All these changes and additions were endorsed unanimously by the executive committee. It is the “will of the executive committee” that these changes be implemented by the Chair subject to consultation with the APS and with the donors of the awards whenever possible.

5. There was a discussion led by Joe Giame of LSU of the instructions for conducting a SESAPS annual meeting. A previously existing set of rules was distributed by SESAPS treasurer John Shriner. Many changes to bring these instructions up to date were discussed. Chair elect, Laurie McNeil will update these instructions and distribute them to the executive committee for comments and additions.

6. The 2010 budget and a proposal for the 2010 budget was presented by John Shriner. The 2010 expenditures were significantly less than income for the section so it was possible to augment the Awards reserves and to add to the SESAPS General Fund. The major expenditures were as usual for the meeting bulletin and the travel awards for students.

The 2011 budget was similar in content and magnitude.

The executive committee unanimously approved the 2011 budget.

7. The final item was a brief presentation by the SESAPS membership coordinator Brad Cox. It was pointed out that after several years of significant increase from 1700 to 2700, the SESAPS membership had stagnated. Even though we added Puerto Rico to SESAPS we received no boost in membership. It was agreed that those that have contacts in Puerto Rico should inquire about this. This was true for most of the other sections. New sections Californian and the Prairie Section are still increasing but they should not have siphoned members away from SESAPS. We are still the largest section but just barely above California. It is not clear why we are stagnating except that it may be a result of the poor economy suppressing the APS membership enrollment in the Southeast. The supplemental enrollment in SESAPS is, of course, free. The stagnation has economic consequences since the majority of the income of SESAPS, which supports the annual meeting and other activities, comes from the four dollar per member grant from the APS. It was agreed to send a letter from the chair and the membership coordinator to all the chairs in the Southeast asking for their help in recruiting new members to SESAPS.

David Haase Proposal

Proposal for changes to the Pegram Award selection process

2010 Pegram Award Selection Committee: Susan Blessing (chair), Wolfgang Christian, David Haase

Committee structure

Have one person from the previous year's committee serve on the current committee, perhaps as chair. This would allow for some continuity between years.

Award description

The current award description is:

The George B. Pegram Award, first awarded in 1971, was created by the Southeastern Section of the American Physical Society to honor "Excellence in the Teaching of Physics in the Southeast." The Award is named for George Braxton Pegram, a native of Durham, NC and a graduate of Duke University who was for many years Chairman of the Department of Physics and Dean of the Graduate School at Columbia University. While he was Treasurer of the American Physical Society, Dr. Pegram played an important role in the formation of the Southeastern Section of the American Physical Society. The Award recognizes college physics teachers who have demonstrated outstanding ability as undergraduate teachers in at least one of the following ways: (a) by producing a number of majors who have continued in a career in physics, (b) by authoring an undergraduate physics textbook which has received national recognition for its excellent quality, or (c) by having an outstanding record of service in teaching as determined by the physics faculties at his own and other institutions.

Our recommendations:

- 1) Change "Excellence in the Teaching of Physics in the Southeast" to "Excellence in Physics Education in the Southeast" to broaden the pool of nominees for the award.
- 2) Change "...college physics teachers who have demonstrated outstanding ability as undergraduate teachers..." to "...physics educators who have demonstrated outstanding ability in undergraduate education..."
- 3) Add "(d) by having an outstanding record of service to physics education in the Southeast."

Nomination Information

The current Nomination Information is:

Nominations for each award should be sent to the appropriate award committee chair by August 1. Four copies of each nomination, consisting of a nominating letter and up to three supporting letters (a maximum of two pages each), should be sent. No other supporting documents are needed. Nominations will be considered active for three years, though updating materials for nominees not chosen in the prior year is encouraged. Past winners are listed below. The nominator is also asked to send an email to the Chair Paul Cottle and Vice-Chair Roxanne Springer of the Section informing them of the submission.

Our recommendations:

- 1) Require at least one of the supporting letters to be from outside the nominee's institution and at least one to be from the nominee's institution.
- 2) Require a CV for the nominee.
- 3) Add "but may be included" after "No other supporting documents are needed."
- 4) Rather than asking for four paper copies, ask that all nomination materials be emailed as a single pdf file to the award committee chair.

Executive Committee

Chair

Dr. Laurie McNeil
Department of Physics &
Astronomy
University of North Carolina
at Chapel Hill
Chapel Hill, NC
27599-3255
Phone: (919) 962-0963
Fax: (919) 962-0480
mcneil@physics.unc.edu

Past Chair

Dr. Paul Cottle
Department of Physics
Florida State University
Tallahassee, FL
32306-4350
Phone: (850) 644-5777
Fax: (850) 644-8630
cottle@phy.fsu.edu

Executive Committee 08 -11

Dr. Matthew E. Edwards
Dean, School of A&S
Professor of Physics
Alabama A&M University
PO Box 338
Normal, AL 35762
Phone: (256) 3728119
Fax: (256) 372-5900
matthew.edwards@aamu.edu

Executive Committee 11 -14

Dr. Michel Pleimling
Department of Physics
Virginia Polytechnic Institute
& State University
Robeson Hall (0435),
Blacksburg, VA 24061
Phone: (540) 231-2675
Fax: (540) 231-7511
Michel.Pleimling@vt.edu

Chair-Elect

Dr. Roxanne Springer
Department of Physics
Box 90305
Duke University
Durham, NC 27708-0305
Phone: (919) 660-2676
Fax: (919) 660-2525
rps@phy.duke.edu

Secretary

Dr. Brad Cox
Department of Physics
PO Box 400714
University of Virginia
Charlottesville, VA 22901
Phone: (434) 982-5377
Fax: (434) 924-4576
bbc2x@virginia.edu

Executive Committee 09-12

Dr. Jorge Piekarewicz
Department of Physics
Florida State University
Tallahassee, FL 32306
Phone: (850) 644-6344
Fax: (850) 644-8630
jpiekarewicz@fsu.edu

Membership Coordinator

Dr. Brad Cox
Department of Physics
PO Box 400714
University of Virginia
Charlottesville, VA 22901
Phone: (434) 982-5377
Fax: (434) 924-4576
bbc2x@virginia.edu

Vice-Chair

Dr. Richard Haglund
Department of Physics &
Astronomy
Vanderbilt University
6301 Stevenson Center
VU Station B #351807
Nashville, TN 37235
Phone: (615) 322-7964
Fax: (615) 343-7263
richard.haglund@Vanderbilt.Edu

Treasurer

Dr. John Shriner
Department of Physics
Box 5051
Tennessee Technological
University
Cookeville, TN 38505
Phone: (931) 372-3481
Fax: (931) 372-6351
jshriner@tntech.edu

Executive Committee 10-13

Dr. Soren Sorensen
Department of Phys. and
Astronomy
University of Tennessee
Knoxville, TN 37996
Phone: (865) 974-7805
Fax: (865) 974-7843
Sorensen@utk.edu

APS Council Observer

Dr. Brad Cox
Department of Physics
PO Box 400714
University of Virginia
Charlottesville, VA 22901
Phone: (434) 982-5377
Fax: (434) 924-4576
bbc2x@virginia.edu

Student Travel Support for SESAPS Meeting

The student must be a presenter at a SESAPS session

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____

ZIP: _____ EMAIL: _____

SCHOOL: _____

UNDERGRADUATE/CLASS: _____

GRADUATE/CLASS: _____

ABSTRACT TITLE: _____

ABSTRACT AUTHORS: _____

AMOUNT REQUESTED (\$300 MAX) _____

PURPOSE OF REQUESTED FUNDS: _____

CERTIFICATION OF RESEARCH ADVISOR (Please have your research advisor sign this line certifying that you are presenting this paper and send an email to Dr. Ernst.)

BY *September 30th*, SEND COPIES OF THIS FORM TO:

Dr. Paul Cottle, Department of Physics, Florida State University, Tallahassee, 32306-4350,
cottle@phy.fsu.edu

Dr. John Shriner, Department of Physics, Box 5051, Tennessee Technological University, Cookeville, TN
38505, jshriner@tntech.edu