

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

**March 29, 2004**

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**A LETTER FROM THE PAST CHAIR**

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Dear SESAPS members,

In my capacity as membership coordinator of the Southeastern Section I am asking the members of SESAPS to encourage your fellow members of the APS who are not yet members of SESAPS to seriously consider joining SESAPS. I would ask that you bring up the issue of SESAPS membership in one of your local departmental meetings to more widely publicize SESAPS.

There is no cost to a member of the APS to join SESAPS. It is easy to do so. Simply go to the SESAPS Web page at <http://www.phy.davidson.edu/sesaps/> and click on the link "Application to Join Units". There are several advantages to being a member of SESAPS and no disadvantages. Membership is a way to become more actively involved in issues that affect everyone in our region.

There are over 1900 members of SESAPS out of approximately 5000 members of the APS in the Southeast. We hope that every member of APS in the Southeast will eventually become a member of SESAPS.

Brad Cox  
University of Virginia  
Membership Coordinator, SESAPS

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**A LETTER FROM THE CHAIR**

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I am happy to serve this year as the chair of the Southeastern Section of the American Physical Society. As a nuclear physicist who has spent a career in the southeast (University of Tennessee and Oak Ridge National Laboratory), I understand the importance of continuing to strengthen our research capabilities and scientific workforce, and in weaving together partnerships and collaborations that keep our region strong in the physical sciences. We are blessed with universities and federal laboratories that have a wealth of research and educational capabilities, and the southeast continues to have a significant leadership representation on Congressional committees of importance. I feel strongly that SESAPS with a larger membership and greater participation by its members can help all of us achieve our scientific goals.

First I want to thank Brad Cox, who served in such an active and successful manner as the 2003 chair of our society. Brad has emphasized increasing membership, as there are approximately 1900 members of SESAPS but 5000 APS members who live and work in the southeast. Our hope is that every member of APS in the southeast will eventually become a member of SESAPS (which costs the member nothing). To work towards this goal, Brad and I would like to implement a "Friends of SESAPS" model, whereby most Physics Departments in the southeast would designate such a SESAPS friend who would be a committed voice

of our society in that department, e.g., helping to promote membership, get students to submit abstracts to the fall meeting, etc. You will hear more from us on establishing this model.

A key part of the activity of our society is the fall meeting. As a second-year graduate student at Vanderbilt, I gave my first 10-minute paper at the 1965 SESAPS meeting, and felt that this was the beginning of my scientific career in many ways. Our fall SESAPS meeting is very important for undergraduate and graduate students presenting papers, and for faculty and laboratory researchers developing and maintaining associations with others in the region. The fall meeting this year will be in Oak Ridge, Tennessee, on November 11 to 13. Chang-Hong Yu of Oak Ridge National Laboratory is the chair of the local organizing committee, and Calvin Howell of Duke University is the chair of the program committee. By the way, the last time Oak Ridge hosted this meeting was 1992, and that was one of the largest SESAPS meetings on record. We hope to exceed that performance in 2004. With the Spallation Neutron Source and the Center for Nanophase Materials Sciences soon coming on-line, we want to show meeting participants some of the exciting new facilities at ORNL.

I look forward to working with you this year.

Lee L. Riedinger  
Deputy Director for Science and Technology  
Oak Ridge National Laboratory

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**The 71st Annual Meeting of the Southeastern Section** of the American Physical Society (SESAPS) will be held November 11-13, 2004 (Thursday-Saturday) at Oak Ridge, TN. The local arrangements committee is chaired by Dr. Chang Hong Yu, Oak Ridge National Lab, P.O. Box 2008, Oak Ridge, TN, 37831, 865-574-4493 (phone), 865-574-8902 (Fax), [chy@mail.phy.ornl.gov](mailto:chy@mail.phy.ornl.gov). The Program committee is chaired by Dr. Calvin Howell of Duke University, 919-660-2632 (phone), [howell@tunl.duke.edu](mailto:howell@tunl.duke.edu). Information about the meeting will be posted on the SESAPS web site: <http://www.phy.davidson.edu/sesaps> as soon as it is available.

**THIS IS THE FIRST CALL FOR ABSTRACTS OF CONTRIBUTED PAPERS:** SESAPS will use electronically submitted abstracts for publication in the BULLETIN of the AMERICAN PHYSICAL SOCIETY. The deadline for the receipt of contributed papers and abstracts will probably be no later than **Friday, August 6, 2004**. The entire program will be organized the following week. All abstracts received electronically by the deadline will be published in the November 2004 BULLETIN of the AMERICAN PHYSICAL SOCIETY. **All abstracts of contributed papers must be prepared in the standard APS format as specified in recent issues of the APS News.** If the abstract is submitted to the APS only on paper, just the title and authors will appear in the BULLETIN.

The scheduled time for your presentation must be obtained from the bulletin WHICH WILL BE AVAILABLE ELECTRONICALLY on the WWW. Meeting rooms will have an overhead projector and chalkboard - to request other audio-visual aids, including 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. Howell.

**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. This year the Program Committee will continue an idea suggested by an APS member. 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 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.**

**THE REGISTRATION FEE STRUCTURE REMAINS THE SAME AS LAST YEAR:**

Registration will be \$40.00 for SESAPS and other APS members, \$55 for nonmembers, \$5 for retired physicists and \$20 for graduate students. Undergraduate students, awardees and banquet speakers will not pay the registration fee, and the latter two do not pay the banquet fee.

**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. The SPS contact person has not been determined at this time. As soon as that person is identified, the contact information will be posted on the SESAPS website.

**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. SPS 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 web site.

**SUGGESTED NOMINATIONS FOR SECTION OFFICERS** should be sent to the Secretary at the address given at the end of this letter for consideration by the Nominating Committee, which is composed of the members of the Executive Committee.

**CONGRATULATIONS TO THE ELECTION WINNERS:** The new vice chair is Paul Avery of the University of Florida. The new executive committee member who will serve from 2004-2007 is Victoria Greene of Vanderbilt University. The names and addresses of all Executive Committee members are at the end of this newsletter. Members are urged to contact the committee with their suggestions and concerns. Do not forget to urge your colleagues to join SESAPS, as it is free if they are APS members.

**CHANGES TO THE BYLAWS:** The Constitution of the APS was amended several years ago. In Article IX, it says that there shall be two Councillors representing the Sections, and that the APS Council shall establish a rotation list of existing Sections. It says further that, "When a Section's turn in the rotation occurs, it will elect a Councillor representing the Sections." There are 8 Sections of APS and each Section has to include in its Bylaws a means of electing one of the two Section Councillors when it is its turn. The APS Council has now approved the needed changes in the Bylaws of SESAPS to bring our bylaws into agreement with the APS Constitution. The members of SESAPS must approve these changes in the bylaws. This [link](#) will take you to a copy of the amended bylaws. You will be asked to approve these changes during our elections in the summer.

**PROCEDURES FOR SESAPS AWARDS**

The following procedures were adopted at the November meeting by a vote of the executive committee.

1. Each committee will consist of three members: the previous award winner, one member appointed for a two-year term by the chair of the section, and the returning member from the previous year's committee, who will serve as chair. In making the appointment to an award committee, the section chair

will attempt to establish a balance in geographical distribution, and between Ph.D. and B.S. granting institutions, and among research fields where appropriate. Any number of committee members may be previous winners of the award.

2. Each committee will be charged by the chair of the section with selecting a recipient and communicating the result only to the chair of the section by September 15. The information to be communicated is:
  - a. The name and institution of the recipient.
  - b. The name and institution of the nominator.
  - c. A short citation ~ 15 words.
3. The chair of the section will notify the winner and the nominator by October 1, and indicate that the nominator usually introduces the winner at the banquet. Should there be more than one nominator, only one introduces the winner. At the same time, the chair informs the secretary of the winner, the nominator and the citation.
4. Nominations for each award should be sent to the award committee chair by June 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. The nominator is also asked to send an email to the Chair ([riedingerl@ornl.gov](mailto:riedingerl@ornl.gov)) and Vice Chair ([avery@phys.ufl.edu](mailto:avery@phys.ufl.edu)) of the Section informing them of the submission.
5. Up to three unsuccessful nominations may be forwarded by one year's committee to the next year's committee.

Time Table

Receipt of nominations by award committee chairs	June 1
Transmission of report of committee to Chair of section	Sept. 15
Notification of winners and nominators	Oct. 1

**All nominations are to be sent to the chairs of the awards committees, who will then distribute them to the committee members and to the Vice Chair of the Section. This year the nominations should be sent to:**

BEAMS: Dr. Kirby Kemper, Office of the Vice President for Research, 109 Westcott Building, Florida State University, Tallahassee, FL 32306-1330; [kirby@phy.fsu.edu](mailto:kirby@phy.fsu.edu)

PEGRAM: Dr. John Shriner, Dept. of Physics, Tennessee Technological University, Box 5051, Cookeville, TN 38505; [JShriner@tntech.edu](mailto:JShriner@tntech.edu)

SLACK: Dr. Marllin Simon, Department of Physics, Auburn University, 201 Allison Laboratory, Auburn, AL 36849; [simonml@auburn.edu](mailto:simonml@auburn.edu)

**Provisional Minutes, 2003 Executive Committee Meeting  
Wrightsville Beach, NC.  
November 6, 2003**

The meeting was called to order by Brad Cox, Chair, at 5:30 p.m.

Attending were Ken Hardy, Brad Cox, Larry Croft, Larry Cain, Lee Riedinger, Chryssa Kouvelotou (APS Representative), Dale Sayers, Ron Mickens (guest), Glenn Edwards, Joe Hamilton, and Calvin Howell.

Larry Cain gave the treasurer's report. We are still in the red, but not badly.

Ken Hardy distributed the minutes of the 2002 meeting, which were approved. Larry gave the election results. Paul Avery of the University of Florida is

the new vice chair and Victoria Greene of Vanderbilt is the new member of the executive committee.

This year's award winners are as follows: Beams Award - Jerzy Bernholic; Pegram Award - John T. Foley; and the Slack Award - William Hamilton and Warren Johnson. Certificates of appreciation were given to Larry Croft and David Ernst.

A discussion of awards was held and it was emphasized that only one of each award per year should be given. However, it was agreed that up to three nominations could be forwarded to the next year's committee. The procedures for this year are: The nominations are sent to the chair of the appropriate committee. Four copies of the nomination letters are to be sent by June 1. The nomination and up to three supporting letters are to be a maximum of two pages each. No other supporting documents are needed. The results of the deliberations are to be sent to the Section Chair by September 15.

A discussion of using the new APS electronic voting system was held. There is a one-time cost of \$900. The board decided to adopt the electronic system. A "voting coordinator" was needed and Paul Avery was appointed.

Brad Cox discussed the success of increasing our membership. The APS wants each section/unit to select a membership coordinator to try to increase the membership in the section and APS. Brad agreed to serve for three years. Currently there are about 3000 APS members in the southeast who are not SESAPS members. Brad will work out means to recruit these.

Distributing the newsletter is one of the largest expenses of the section, and it was decided to try electronic distribution. The details will be worked out before the winter newsletter.

Next year's meeting will be at Oak Ridge. The dates for next year are Nov.11-13. The 2005 meeting will be hosted by the University of Florida in Gainesville, FL.

Larry Croft discussed how the student travel support was awarded and made suggestions for consideration at a future meeting.

Ron Mickens discussed archives that are now sent to the Niels Bohr Library at AIP. Members with material of historic interest should contact Ron who was asked to head the ad-hoc committee on archives. This committee will be reestablished each year as needed.

Brad discussed the need for getting section members to run for national office in the APS.

The board approved the budget.

Chairman	\$ 100
Secretary	\$1000
Treasurer	\$ 100
Banquet Speaker	\$ 500
APS Bulletin	\$9860
Student Travel	\$2500
Meeting Support	\$1000
Marsh White award	\$ 200
Misc.	\$ 300
Total	\$15560

Ken Hardy  
Secretary

**SOUTHEASTERN SECTION OF THE AMERICAN PHYSICAL SOCIETY  
EXECUTIVE COMMITTEE 2004**

<p>Chair Dr. Lee Riedinger Oak Ridge National Lab P.O. Box 2008 Oak Ridge, TN 37831-6263 865 574 4321 P 865 241 2967 F <a href="mailto:riedingerl@ornl.gov">riedingerl@ornl.gov</a></p>	<p>Chair Elect Dr. Calvin Howell Department of Physics and TUNL Duke University, Box 90308 Durham, NC 27708-0308 919 660 2632 P 919 660 2634 F <a href="mailto:howell@tunl.duke.edu">howell@tunl.duke.edu</a></p>
<p>Vice Chair Dr. Paul Avery Phys. Dept., Univ. Fla. Box 118440 Gainesville, FL 32611-8440 362 392 9264 P 352 392 8863 F <a href="mailto:avery@phys.ufl.edu">avery@phys.ufl.edu</a></p>	<p>Past Chair Dr. Bradley Cox Department of Physics, PO Box 400714 University of Virginia Charlottesville, VA 22901 434 982 5377 P 434 982 3575 F <a href="mailto:cox@uvahea.phys.virginia.edu">cox@uvahea.phys.virginia.edu</a></p>
<p>Treasurer Dr. Larry Cain Department of Physics Davidson College, Box 6919 Davidson, NC 28035-6919 704 894 2347 P 704 894 2894 F <a href="mailto:lacain@ davidson.edu">lacain@davidson.edu</a></p>	<p>Secretary Dr. Kenneth Hardy Department of Physics Florida International Univ. Miami, FL 33199 305 348 2605 P 305 348 6700 F <a href="mailto:hardyk@fiu.edu">hardyk@fiu.edu</a></p>
<p>Executive Committee 2001-2004 Dr. Glen Edwards Department of Physics, PO Box 90309 Duke University Durham, NC 27708 919 660 2674 P 919 681 7416 F <a href="mailto:edwards@fel.duke.edu">edwards@fel.duke.edu</a></p>	<p>Executive Committee 2002-2005 Dr. Stephen Teitsworth Department of Physics, Box 90305 Duke University Durham NC 27708-0305 919 660 2506/2551 P 919 660 2525 F <a href="mailto:teitso@phy.duke.edu">teitso@phy.duke.edu</a></p>
<p>Executive Committee 2003-2006 Dr. Dale Sayers North Carolina State Univ. PO Box 8202 Raleigh NC 27695-8202 919 515 4453 P 919 515 3371 F <a href="mailto:Dale_Sayers@ncsu.edu">Dale_Sayers@ncsu.edu</a></p>	<p>Executive Committee 2004-2007 Dr. Victoria Greene Vanderbilt University Box 1807, Station B Dept. of Physics and Astronomy Nashville, TN 37235 615 343 0657 P 615 343 7263 F <a href="mailto:senta.v.greene@vanderbilt.edu">senta.v.greene@vanderbilt.edu</a></p>
<p>APS Representative Dr. Joe Hamilton Department of Physics and Astronomy Vanderbilt Univ., Box 1807-B Nashville, TN 37235 615 322 2456 P 615 343 7263 F <a href="mailto:j.h.hamilton@vanderbilt.edu">j.h.hamilton@vanderbilt.edu</a></p>	

APPLICATION FOR STUDENT TRAVEL SUPPORT TO THE 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 (\$250 MAX) \_\_\_\_\_

PURPOSE OF REQUESTED FUNDS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CERTIFICATION OF RESEARCH ADVISOR (Please have your research advisor sign this line certifying that you are presenting this paper, or have him or her send an email to Dr. Cox.)

\_\_\_\_\_

RETURN BY 15 OCTOBER TO:  
Dr. Brad Cox  
[cox@uvahea.phys.virginia.edu](mailto:cox@uvahea.phys.virginia.edu)  
Dept. of Physics  
P.O. Box 400714  
University of Virginia  
Charlottesville, VA 22901