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

March 3, 2006

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A	LETTER	FROM	THE	CHAIR	

I am pleased to serve as Chair of the Executive Committee of the Southeastern Section of the American Physical Society (SESAPS). Though not a native of the Southeast, I have spent twenty pleasurable years in Gainesville at the University of Florida and have developed many collaborative partnerships with physicists, computer scientists and educators from the region in my work in high energy physics and grid computing.

The Southeast region has achieved increased national and international visibility in recent years. In my view, this visibility results from several factors. Many physics departments in the region have grown in size and stature, making the region attractive to high-quality faculty, postdocs and students. Physicists from the region are playing increasingly important roles in large experimental collaborations, particularly those in nuclear and particle physics. Most important, in my opinion, have been the recent establishment and upgrades of southeast physics research facilities which are yielding significant results. These facilities include Oak Ridge National Laboratory, where the \$1.4B Spallation Neutron Source (SNS) should deliver its first pulsed neutron beams in 2007; the Livingston Observatory of LIGO, which has finished its fourth science run and for which planned upgrades will continue to increase its sensitivity to gravitational wave sources; the National High Magnetic Field Laboratory (NHMFL) which has one of the best B/T facilities in the world and serves multiple disciplines; and Thomas Jefferson National Accelerator Facility (JLab) which has collected a torrent of data from electron-nuclear collisions and is awaiting final approval from DOE to double the electron beam energy.

The SESAPS organization has a rich tradition built on decades of stewardship by many dedicated individuals. I witnessed this stewardship firsthand during 2005, and it is a pleasure for me to acknowledge the people who contributed to SESAPS's success during this time. First of all, I want to express my gratitude to Calvin Howell for his leadership as the Chair of our society last year and for several innovations that took place during his watch. I am thankful for the superb job done by the staff of the University of Florida Physics Department in hosting the 2005 SESAPS Meeting. I give a special word of appreciation to Alan Dorsey as the head of the local organizing committee, and to Leilanie Merrill who was instrumental in putting together a first-class meeting and registration website, designing and creating a meeting bulletin at low cost and creating several labor-saving advances that I will attempt to bring to the APS in order to

benefit other Sections. I am indebted to the Program Committee for their hard work in putting together a broad and cutting-edge scientific program, including ten invited sessions.

I want to thank Brad Cox as Membership Coordinator for taking on the task of increasing membership. Thanks to his efforts, our membership increased from 2069 to 2323, the largest percentage increase (12%) in recent years. It's interesting to note that SESAPS is the largest APS Section with 5.1% of the total APS membership.

I also want to recognize Larry Cain as Treasurer and Stanley R. Deans as Secretary. Their constant efforts behind the scenes provide the glue and institutional memory that holds SESAPS together. I relied on them heavily last year for information and various tasks and will continue to do so in 2006.

I will continue to work, as Calvin did before me, to increase our membership, particularly since the number of SESAPS members is still a minority of the APS members residing in our region. Continued increase in membership (\$4 per person goes to SESAPS), coupled with our ability to run the annual meeting without the costly APS Bulletin (a huge cost-saving innovation in 2005), will make it possible for SESAPS to expand its travel program for graduate students, increase the number and amount of awards to undergraduate presenters at the SPS sessions and possibly start new programs.

Note that if you are a member of the APS and live in the southeast region but are not a member of SESAPS, you should join SESAPS now! It's free and simple. Go to <a href="http://www.aps.org/memb/unitapp.cfm">http://www.aps.org/memb/unitapp.cfm</a>>. You will have the options of either adding SESAPS to your membership online or printing out a unit's membership form and faxing the completed form to the APS headquarters in College Park, MD.

Our premier activity is the SESAPS annual meeting, which will be hosted this fall by the College of William and Mary and JLab in Williamsburg, Virginia. Professor Marc Sher of W&M is the Chair of the local organizing committee and Professor Tom Clegg of UNC is the Chair of the Program Committee. As Calvin noted in his Chair's letter last year, the annual SESAPS conference provides physicists in our region a valuable opportunity to survey physics beyond their own specialty. I strongly encourage you to plan to attend the SESAPS-2006 meeting in this charming location.

Sincerely,

Paul Avery Professor of Physics, University of Florida

#### A MESSAGE FROM THE MEMBERSHIP COORDINATOR

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 enrolled in 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 follow this link to the membership application form. <a href="http://www.aps.org/memb/joinaps.cfm">http://www.aps.org/memb/joinaps.cfm</a> 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 approximately 2323 members of SESAPS (up approximately 250 from 2005) 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

The 73<sup>rd</sup> Annual Meeting of the Southeastern Section of the American Physical Society (SESAPS) will be held November 9-11, 2006 (Thursday-Saturday) at the Williamsburg Hospitality House in Williamsburg, VA <a href="http://www.williamsburghosphouse.com/">http://www.williamsburghosphouse.com/</a>. The local arrangements committee is chaired by Dr. Marc Sher, Department of Physics, College of William&Mary, Williamsburg, VA 23187-8795 (Ph: 757-221-3538; <a href="mailto:sher@physics.wm.edu">sher@physics.wm.edu</a>.) The Program Committee is chaired by Dr. Thomas Clegg, of the University of North Carolina (Ph: 919-843-8168; <a href="mailto:clegg@physics.unc.edu">clegg@physics.unc.edu</a>.) Information about the meeting will be posted on the SESAPS website: <a href="mailto:http://www.phy.davidson.edu/sesaps">http://www.phy.davidson.edu/sesaps</a> as soon as it is available.

#### 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 Friday, August 18. 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 WHICH 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. Clegg.

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. The SPS contact person at William & Mary is Dr. Jan Chaloupka (Ph: 757 221 3526; jan@physics.wm.edu).

**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 the Secretary at the address given at the end of this newsletter for consideration by the Nominating Committee, which is composed of the members of the Executive Committee. This year we will select the next Vice Chair.

CONGRATULATIONS TO THE ELECTION WINNERS. The new Vice Chair is Dr. David Haase of North Carolina State University and The Science House. The new members of the Executive Committee are Dr. Kathy Whatley of UNC-Asheville, who will serve through 2010, and Dr. Bob Jones of the University of Virginia, who will serve through 2009. SESAPS members are urged to contact the Executive Committee with their suggestions and concerns. Please urge your colleagues to join SESAPS; it is free for APS members.

#### PROCEDURES FOR SESAPS AWARDS

The following procedures are relevant for the awards.

- 1. Award Committee Chairs are listed in the Winter Newsletter (see below).
- 2. Nominations for each award must be sent to the Award Committee Chair before August 15. (Four copies of each nomination, consisting of a nominating letter and up to three supporting letters, should be sent.) Nominations will be considered active for three years; updating materials for nominees not chosen in the prior year is encouraged.
- 3. The nominator should send email to the Chair and Vice Chair informing them of the submission.
- 4. The Award Committee Chairs report to the SESAPS Chair regarding winners before September 15.
- 5. Winner and nominators are notified around the first of October. The nominator is asked to introduce the nominee at the annual meeting when the award is bestowed.

#### **BEAMS**

Dr. Mark A. Novotny
Department of Physics & Astronomy
Mississippi State University
P.O. Drawer 5167
Mississippi State, MS 39762
man40@ra.msstate.edu

#### **PEGRAM**

Dr. Steve Teitsworth
Department of Physics
Box 90305
Duke University
Durham NC 27708-0305
teitso@phy.duke.edu

#### **SLACK**

Dr. Laird Kramer
Department of Physics, CP 204
Florida International University
11200 SW 8th St.
Miami, FL 33199
Laird.Kramer@fiu.edu

#### **Beams, Pegram and Slack Award Donations**

The three awards presented by the Southeastern Section rely on member contributions to sustain them. Many members of the section have made previous donations for the Jesse Beams Award, the George Pegram Award, and the Francis Slack Award. If you would like to contribute to the Beams-Pegram Fund and/or the Slack Fund, please feel free to print this section and use it to make your contribution by sending it and your check made out to SESAPS to Dr. Laurence Cain, SESAPS Treasurer, Department of Physics, Box 6919, Davidson College, Davidson, NC 28035-6919. Dr. Cain will also accept contributions at the SESAPS meeting. Thank you for your continuing support of these awards.

Name					
Beams-Pegram Award Fund Amount					
Slack Award Fund Amount					
Total Contribution					

#### **Highlights of the Minutes of the Executive Committee Meeting of SESAPS**

#### November 11, 2005 Gainesville, FL

#### Members Attending:

C. Howell, L. Cain, P. Avery, L. Riedinger, S. Deans, T. Clegg, B. Cox

- 1. Opening remarks by C. Howell
- 2. L. Cain gave budget reports including Beams-Pegram Funds and recent yearly history. Next year's budget was approved (listed below) and income is expected to be about the same as outgo.
- 3. S. Deans reported on award materials, newsletters, and deadlines.
- 4. T. Clegg reported on elections. Also, the Amendment under consideration was approved.
- 5. C. Howell discussed the Appointment of APS Council Observer and the importance of staying in contact with APS. B. Cox was appointed our official Observer.
- 6. Future SESAPS meetings were discussed and C. Howell passed out Guidelines for Hosting the Annual SESAPS Meeting. This is a working document that will be modified and improved.
  - The practice of not having APS print the Bulletin will continue. The program chair will have the responsibility of producing the Bulletin. L. Cain reviewed the cost saving realized by this new procedure. An abstract deadline of Aug. 18 was passed by the EC. The printed Bulletin will be sent to AIP's Niels Bohr Library Archives. College of W&M and JLab will co-host the 2006 SESAPS meeting
- 7. The SESAPS Award Nomination Process including deadlines and carry over of nominations was discussed by T. Clegg. The EC agreed that the deadline this year for receiving any nomination material is Aug. 15.
- 8. An update on the membership drive was given by B. Cox. Membership efforts include email to APS members, letters to department chairs, SESAPS website link to enrollment page and outreach to NASA employees.
- 9. The status of student travel awards was given by L. Riedinger.
- 10. Joe Hamilton was invited to discuss efforts to select SESAPS members to APS committees. This report emphasized the advantages including visibility and drawing attention to activities in the southeast. Now it is useful to support getting David Ernst elected to the General Council, and urge members to use the Forums as a way in.
- 11. Lawrence Norris (NSBP) was invited to report on involvement of NSBP with SESAPS. NSBP Goals, organization, conferences, programs, meetings and cooperation with NSHP,

TSAPS, and SESAPS was discussed. More discussion was on education, professional leadership, and exploration of ways for closer cooperation between NSBP and SESAPS.

12. The EC was advised to be thinking about who can take over as Treasurer when L. Cain's term ends.

The final budget approved by the board:

Chair	\$	100
Secretary		300
Treasurer		100
Banquet Speaker		500
Bulletin APS	4	4,800
Student Travel	2	2,500
Meeting Support		1,000
SPS (Marsh White)		200
Miscellaneous		300

Total \$9,800

The meeting was adjourned at 12:00 p.m.

Stanley R. Deans Secretary

### **Executive Committee**

#### Chair

Dr. Paul Avery Department of Physics P.O. Box 118440 University of Florida Gainesville, FL 32611-8440

352-392-9264 P 352-392-8863 F avery@phys.ufl.edu

#### **Past Chair**

Dr. Calvin Howell
Department of Physics and TUNL
P. O. Box 90308
Duke University
Durham, NC 27708-0308

919-660-2632 P 919-660-2634 F howell@tunl.duke.edu

#### **APS Council Observer**

Dr. Brad Cox
Department of Physics,
PO Box 400714
University of Virginia
Charlottesville, VA 22901
434-982-5377 P
434-982-3575 F
cox@uvahea.phys.virginia.edu

#### **Executive Committee 05-08**

Dr. Paul Sheldon Vanderbilt University Dept. of Physics and Astronomy VU Station B 351807 (Regular Mail) 6301 Stevenson Center (Street Address) Nashville, TN 37235-1807 615-343-0484 P 615-322-6164 (Messages) 615-343-7263 F Paul.Sheldon@Vanderbilt.edu

#### **Chair-Elect**

Dr. Tom Clegg Department of Physics & Astronomy University of North Carolina Chapel Hill, NC 27599-3255

919-843-8168 P (UNC) 919-660-2609 P (TUNL) 919-962-0480 F clegg@physics.unc.edu

#### **Secretary**

Dr. Stanley R. Deans Department of Physics, PHY 114 University of South Florida Tampa, FL 33620-5700

813-974-1639 P 813-974-5813 F sdeans@cas.usf.edu

#### Executive Committee 06, 07-10

Dr. Kathy Whatley
Associate Vice Chancellor for
Natural Sciences
CPO 1411
UNC Asheville
One University Heights
Asheville, NC 28804
828-250-3880 P
828-232-5102 F
whatley@unca.edu

#### **Executive Committee 06-09**

Dr. Bob Jones
Department of Physics,
PO Box 400714
University of Virginia
Charlottesville, VA 22904-4714
434-924-3088 P
434-924-4576 F
rrj3c@virginia.edu

#### Vice Chair

Dr. David Haase Physics Department NC State University & The Science House Raleigh, NC 27695-8211

919-515-6118 P 919-515-7545 F david haase@ncsu.edu

#### **Treasurer**

Dr. Larry Cain
Department of Physics
Davidson College
P. O. Box 6919
Davidson, NC 28035-6919
704-894-2347 P
704-894-2894 F
lacain@davidson.edu

#### **Executive Committee 04-07**

Dr. Victoria Greene
Box 1807, Station B
Department of Physics & Astronomy
Vanderbilt University
Nashville, TN 37235
615-343-0657 P
615-343-7263 F
senta.v.greene@vanderbilt.edu

#### **Membership Coordinator**

Dr. Brad Cox
Department of Physics
PO Box 400714
University of Virginia
Charlottesville, VA 22901
434-982-5377 P
434-982-3575 F
cox@uvahea.phys.virginia.edu

## 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 (Ple certifying that you are presenting this paper and send	

#### RETURN BY OCTOBER 15th TO:

Dr. Calvin Howell
Department of Physics and TUNL
P. O. Box 90308
Duke University
Durham, NC 27708-0308
howell@tunl.duke.edu