

**SUMMER NEWSLETTER
OF THE
SOUTHEASTERN SECTION
OF THE
AMERICAN PHYSICAL SOCIETY**
July 8, 2005

MESSAGE FROM THE CHAIR

The 72nd Annual Meeting of the Southeastern Section of the APS will be hosted by the University of Florida. As always, this meeting provides a wonderful survey of the frontiers of physics and gives a glimpse of research being done in our region. As part of our celebration of *the World Year of Physics*, several invited sessions at the meeting are devoted to topics related to the work of Albert Einstein. The invited sessions include topics on Dark Matter and Dark Energy, the Bose-Einstein Condensate, and the history of physics, which would not be complete without recognizing the many contributions of Albert Einstein. I strongly recommend that you make the SESAPS-2005 meeting part of your celebration of *the World Year of Physics*. I hope to see you in Gainesville in November.

If you have colleagues in your department who are members of the APS but are not members of SESAPS, please urge them to join SESAPS now! It's free and simple. They should go to <http://positron2.aps.org/memb/unitapp.cfm>. Once at the unit membership site, they will have two options: (1) adding SESAPS to their membership online using the APS secure server (this option requires their APS web username and password), and (2) printing out a units membership form and faxing the completed form to the APS headquarters in College Park, MD.

One of the ways our unit recognizes those who make outstanding contributions to physics research, service and teaching in the Southeast is through the SESAPS awards. An important component of the funding for these awards comes from contributions made by SESAPS members. Your gift to any of the awards will help keep the financial base for these awards sound and will be greatly appreciated. *Contributions to the SESAPS awards funds are tax deductible. Please visit our web site for details on making contributions to the SESAPS award funds:* <http://www.phy.davidson.edu/SESAPS/welcome.html>, or use the form found later in this newsletter.

I call your attention to the extension of the deadline for submitting nominations for the SESAPS awards. Recognizing that the summer is a period when many physicists are focusing on research and are traveling more than usual, the Executive Committee has decided to extend the nomination deadline for the SESAPS awards. The additional time should be beneficial to some and will not compromise the selection process. ***The new deadline for submitting nominations for the SESAPS awards is August 15, 2005.*** See the "Awards Nominations" section below for details.

Calvin R. Howell

Professor of Physics at Duke University and
Deputy Director of the Triangle Universities Nuclear Laboratory

ANNUAL MEETING INFORMATION

The 72nd Annual Meeting of the Southeastern Section of the American Physical Society (SESAPS) will be held November 10-12, 2005 (Thursday-Saturday), in Gainesville, Florida. Our host for this meeting is the University of Florida.

The local arrangements committee is chaired by

Dr. Alan T. Dorsey
Department of Physics, Box 118440
University of Florida
Gainesville, FL 32611-8440
352-392-0521 (phone)
chair@phys.ufl.edu

The Program Committee chair is

Dr. Paul Avery
Department of Physics, Box 118440
University of Florida
Gainesville, FL 32611-8440
352-392-9264 (phone)
avery@phys.ufl.edu

The conference hotel is the Hilton University of Florida Conference Center, located very near the University of Florida. The address is

Hilton University of Florida Conference Center
1714 SW 34th Street
Gainesville, FL 32607
Tel: (352) 371-3600
Fax: (352) 371-0306

Directions to the hotel can be found at <http://www.ufhilton.com/>.

There is a negotiated price of \$99 per night for SESAPS 2005 participants. You must mention the group code **APA** in order to receive this price. The hotel is holding rooms at this price until October 10, 2005. Participants are expected to make their own hotel arrangements (please see the conference web site <http://www.phys.ufl.edu/sesaps05.html> for additional details).

There will be a conference banquet on Friday evening.

MEETING FACILITIES

The scientific sessions will take place in the meeting rooms reserved at the Conference Center. The rooms include an auditorium and four smaller meeting rooms, one of which will serve as the poster room and general break room. All meeting rooms are equipped with LCD projectors and speakers are strongly encouraged to use electronic projection. You may use your laptop for driving the projector. However, in order to save setup time, it is preferred that speakers use the conference computer for presentation. We recommend that you bring the electronic file for your presentation either on a CD or a memory stick. All speakers should plan to arrive at the meeting room at least 15 minutes prior to the start of the session. Questions about the program should be directed to Professor Avery.

The Conference Center is equipped with wireless access to the internet. Any laptop with wireless capability will be able to use this feature, though there may be a fee assessed by the Conference Center.

MEETING PROGRAM

Welcome Reception: The program begins with a Welcome Reception Wednesday evening (5:00PM – 8:00PM) in the Century Ballroom at the Conference Center. Everyone is cordially invited.

Scientific Program: The scientific program begins Thursday morning, November 10 and concludes by Saturday at noon. We are planning to have invited sessions in ten areas: particle physics, dark matter/dark energy, nanoscience, astrophysics, computational science, Bose Einstein condensate/atomic and molecular physics, biophysics, condensed matter physics, history of physics and physics education. It is possible that one or two of the invited sessions might become Symposia or Focus Sessions, but that will be determined later. The SESAPS business meeting will be held on Friday late afternoon followed by a banquet at approximately 7:30 p.m. We are in the process of selecting a speaker for the banquet and will update the web site at the appropriate time.

Call for Abstracts of Contributed Papers:

The SESAPS meeting will use electronically submitted abstracts for publication in the 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 BULLETIN. For details on abstract submission go to <http://www.aps.org/meet/SES05/>. The deadline for abstract submission is 5:00 PM EDT on Friday, **August 5, 2005**. The scheduled time for your presentation will be available electronically on the web prior to the meeting.

MEETING REGISTRATION and REGISTRATION FEES

Registration for the meeting can be done online at the conference registration site at <http://www.phys.ufl.edu/sesaps05.html>. For security reasons, payments will not be taken online. The registration form can be submitted online, or printed and then faxed or mailed. Payment must be made at the meeting registration desk.

To compensate for the rising costs of professional meetings, the Executive Committee has decided to increase the registration fees of the SESAPS meetings starting this fall. The new fee structure represents a weighted compromise between raising sufficient revenue to significantly ease the burden on the hosting institution while keeping the meeting affordable for the community it serves. The registration fees for the SESAPS-2005 meeting are:

SESAPS and APS members:	\$60
Nonmembers:	\$80
Retired APS members:	\$30
Graduate students:	\$30
Undergraduate students:	free
Banquet fees:	\$30

Awardees and banquet speakers will not pay the registration or banquet fee.

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 AUTHOR(S) 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.**

AAPT SESSION

We are pleased that the Florida AAPT (American Association of Physics Teachers) will have its Fall meeting in conjunction with the SESAPS meeting. Details of registration, joint sessions and participation are still being worked out and updates will appear on the conference web site (<http://www.phys.ufl.edu/sesaps05.html>).

SPS SESSION

The [Society of Physics Students Chapter at UF](#) is organizing a contributed session and a poster session for undergraduate students. These SPS sessions will be held on Saturday, November 12, 2005. Undergraduate students are encouraged to submit abstracts for presentation in the SPS sessions. Abstracts for the SPS sessions should be emailed to [Dr. Robert DeSerio](#) at the University of Florida. The deadline for SPS-session abstract submission is **October 7, 2005**. All students who present at one of the SPS sessions are eligible for the **Marsh White Award**, which will be given to the best undergraduate presenter. Due to the necessity for judging, undergraduate students who present at the regular SESAPS sessions will not be eligible for this award.

Undergraduate students who present only in the SPS sessions are not required to register for the SESAPS meeting. These students are not eligible for the SESAPS student travel grant.

Instructions for submitting an abstract to the SPS sessions

1. Submission: By email only to [Dr. Robert DeSerio](#)
2. **Deadline: Friday, October 7, 2005**
3. Abstract file format: MSWord
4. Abstract style: Use the [template](#)
5. Presentation type: Oral or poster presentation (should be specified at the bottom of the abstract)

TRAVEL SUPPORT FOR STUDENTS

Students will be pleased to learn that modest travel grants will again be available for those presenting research papers at the SESAPS sessions. Undergraduate students giving papers only in the SPS sessions are not eligible for travel support. An application is included below.

AWARD NOMINATIONS

Your help is sought in advertising the upcoming (extended) deadline for annual nominations for the three SESAPS awards. The deadline for nominations for SESAPS awards is **August 15**. 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."

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 (howell@tunl.duke.edu) and Vice Chair (clegg@physics.unc.edu) of the Section informing them of the submission.

Nominations for the Jesse Beams Award should be sent to:

Professor Mark A. Riley
 214 Keen Building
 Department of Physics
 Florida State University
 Tallahassee, FL 32306
mriley@nucmar.physics.fsu.edu

Nominations for the George B. Pegram Award should be sent to:

Professor Cynthia Keppel
 Jefferson Laboratory
 Mail Stop 12H
 12000 Jefferson Ave.
 Newport News, VA 23606
keppel@jlab.org

Nominations for the Francis G. Slack Award should be sent to:

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

SESAPS OFFICER AND EXECUTIVE COMMITTEE NOMINATIONS

Your help is needed in identifying talented members of our regional physics community who would be interested, willing, and effective in serving in a leadership role within SESAPS. Elections will be held electronically by SESAPS in October to select a Vice-Chair (who would in subsequent years serve as Chair-Elect and then as Chair), and two new members of the SESAPS Executive Committee - one to serve a standard four-year term, and one to serve for five years (one year to complete the term of deceased Executive Committee member Dale Sayers, followed by a standard four-year term). Results of the election will be announced at the November meeting in Gainesville, Florida.

Please send your suggestions of persons whom you believe would be appropriate candidates for these positions on the Executive Committee to Thomas B. Clegg (clegg@physics.unc.edu), chair of the 2005 SESAPS nominating committee. For each person suggested, we would appreciate your including comments about why you support them. To be most helpful, your suggested names and supporting information should arrive before August 15th.

AMENDMENT OF BYLAWS

Because of changes in the APS Constitution and how Sections are represented, the Section bylaws must be amended. Under the new rotating schedule of Section Councilors, the Southeastern Section had a Councilor from 2001-2004. The next Southeastern Section Councilor will serve from 2017-2020. The following sections in our Bylaws must be changed. As specified in the Bylaws, these changes were published in the summer 2004 newsletter and were discussed at the SESAPS Business meeting in November 2004. These changes will be voted upon by the SESAPS membership during the election in October 2005. Strikethrough italicized portions will be deleted and italicized portions will be added. The full text of the current Bylaws can be found at <http://www.phy.davidson.edu/SESAPS>.

ARTICLE VI – SECTION OFFICERS, AND SECTION COUNCILLOR ADVISOR AND COUNCIL OBSERVER

7. **Duties of the Section Councilor Advisor.** *When it is the section's turn, in the rotation among sections as established by The Council of The Society, a Section Councilor will be elected as prescribed below. The Section Councilor ~~The Section Council Advisor~~ shall serve as liaison between the Council of the Society and the Executive Committee of the Section. Following each Council meeting, the Section Councilor *Advisor* shall report to the Chair and the Secretary/Treasurer regarding Council actions that affect the status and operations of the Section. Reports shall be made to the entire Executive Committee during their regularly scheduled meetings.*
8. **Council Observer.** *During years in which the Section does not have an elected Councilor, the Executive Committee will appoint a Council Observer. This person will attend Council meetings and will perform the duties described in Article VI.7 of these Bylaws.*

ARTICLE VII—ELECTION AND TENURE OF THE OFFICERS, EXECUTIVE COMMITTEE MEMBERS, AND SECTION COUNCILLOR ADVISOR

4. **Nomination and Election of the Section Councilor Advisor.** *During the final year of the term of a Section Council Advisor, the Secretary shall determine from the Executive Secretary if the terminating Section Council Advisor is to continue. Such determination shall be made by the Executive Secretary based on Section membership according to rules specified in the Constitution and Bylaws. If the position is to continue, the Executive Committee shall nominate at least two candidates for the position. The Secretary shall inform the Section members of the candidates along with the regular ballot for officers. The Treasurer shall include these election results in his report, and the Secretary shall*

provide notification to the general membership. Two years prior to the first year of the Section's turn in the rotation established by the Council, the Section will elect a Section Councilor. The nominating Committee shall nominate at least two candidates for this office, following the same procedure as that for election of officers of the Section and Members-at-large of the Executive committee. The Section Councilor shall serve for one year as a non-voting Council Observer and then for a term of four years as a voting member of the Council, except when a different term is specified by the Council.

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 _____

**SOUTHEASTERN SECTION OF THE AMERICAN PHYSICAL SOCIETY
EXECUTIVE COMMITTEE 2005**

Chair Dr. Calvin Howell Department of Physics and TUNL Duke University, Box 90308 Durham, NC 27708-0308 919 660 2632 P 919 660 2634 F howell@tunl.duke.edu	Chair Elect Dr. Paul Avery Department of Physics University of Florida, Box 118440 Gainesville, FL 32611-8440 362 392 9264 P 352 392 8863 F avery@phys.ufl.edu
Vice Chair Dr. Thomas B. Clegg Department of Physics UNC – Chapel Hill Chapel Hill, NC 27599-3255 919 843 8168 P 919 962 0480 F clegg@physics.unc.edu	Past 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 riedingerl@ornl.gov
Treasurer Dr. Larry Cain Department of Physics Davidson College, Box 6919 Davidson, NC 28035-6919 704 894 2347 P 704 894 2894 F lacain@davidson.edu	Secretary Dr. Stanley R. Deans Department of Physics, PHY 114 University of South Florida Tampa, FL 33620 813 974 1639 P 813 974 5813 F sdeans@cas.usf.edu
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 teitso@phy.duke.edu	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 senta.v.greene@vanderbilt.edu
Executive Committee 2005-2008 Dr. Paul D. Sheldon Vanderbilt University Box 1807, Station B Dept. of Physics and Astronomy Nashville, TN 37235 615 343 0484 P 615 343 7263 F paul.sheldon@vanderbuilt.edu	Membership Coordinator Dr. Bradley Cox Department of Physics, PO Box 400714 University of Virginia Charlottesville, VA 22901 434 982 5377 P 434 982 3575 F cox@uvahep.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 (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. Riedinger.)

RETURN BY OCTOBER 15th TO:

Dr. Lee Riedinger
Oak Ridge National Lab
P.O. Box 2008
Oak Ridge, TN 37831-6263
riedingerl@ornl.gov