

WINTER NEWSLETTER
OF THE
SOUTHEASTERN SECTION
OF THE
AMERICAN PHYSICAL SOCIETY

APRIL 1, 1998

The 65th Meeting of SESAPS will be held in Miami, Florida on 13-15 November 1998. Our host for this meeting will be the Florida International University Physics Department. The local arrangements committee is chaired by Ken Hardy who may be reached at (305) 348-2605 (phone), (305) 348-3053 (fax) and HARDYK@SERVAX.FIU.EDU (e-mail).

THIS IS THE FIRST CALL FOR ABSTRACTS OF CONTRIBUTED PAPERS: SESAPS will use electronically submitted abstracts (brief instructions are at the end of this newsletter) for publication in the Bulletin of the AMERICAN PHYSICAL SOCIETY. The deadline for the receipt of contributed papers and abstracts is no later than **Friday, August 28, 1998**. The entire program will be organized the following week. All abstracts received electronically by the deadline will be published in the November 1998 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 ABSTRACT FEE HAS BEEN ELIMINATED, BUT THE FEE STRUCTURE FOR THE MEETING HAS BEEN CHANGED. THE NET COST TO MEMBERS WHO SUBMIT ONE ABSTRACT WILL BE LOWER. The Program Chairman is:

Dr. Kirby Kemper
Department of Physics
Florida State University
Tallahassee, FL 32306
(850) 644 2338 (Phone)
(850) 644 9848 (Fax)
KIRBY@FSU.EDU (e-mail)

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. Kemper.

THE INNOVATION FROM PREVIOUS MEETINGS IN CONTRIBUTED PAPERS WILL BE CONTINUED! Invited papers at this meeting, as at 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 PROGRAM CHAIRMAN INVITES SUGGESTIONS FROM THE MEMBERSHIP REGARDING THE SUBJECT OF INVITED PAPERS. Currently, sessions on the following topics are scheduled: Applied Physics, Astronomy/Astrophysics, Atomic-Molecular-and-Optical Physics, Biophysics, High Energy/Particle Physics, Intermediate Energy Electron Scattering, Materials Research/Condensed Matter, Nuclear Physics and Physics Teaching. If sufficient interest is expressed, a session on outreach programs will be scheduled. Several of the sessions will be invitational sessions, and several sessions will consist of invited and contributed papers. Naturally, contributed papers on any subject in physics will be accepted but may not have a session devoted exclusively to their subject matter.

A PROGRAM OF PHYSICS TEACHING DEMONSTRATIONS IS BEING PLANNED. Members wishing to participate in a teaching demonstration program should contact Dr. Kemper for details about this program. The demonstration program will be held at Florida International University.

FLORIDA INTERNATIONAL UNIVERSITY WILL BE OUR HOSTS FOR THE 1998 MEETING OF SESAPS. The meetings will be held at the Radisson Mart Plaza Hotel, which will be the headquarters hotel. The phone number for reservations is 305 261-3800. Mr. Peter Waxen will be able to resolve any problems. The hotel is close to the airport and the University. The room rate is \$85.00. Miami offers many entertainment and unique environmental attractions. Viscaya Museum and Gardens, the Bayside Market Place, The Parrot Jungle, Fairchild Tropical Gardens, Everglades National Park, the Florida Keys, and the best beaches in the US are close and accessible. There are many fine restaurants and clubs featuring continental, traditional, and Spanish dining. The historic South West 8th Street is the center of Cuban Culture. Restaurants in this area feature traditional Cuban food and atmosphere. There are excellent seafood cafes, including the world famous Joes Stone Crab. The South Beach area features many late night cafes, sidewalk cafes and dance clubs. For those who care, celebrities such as Madonna and Sylvester Stallone can frequently be seen here. We look forward to seeing you in Miami.

FLORIDA INTERNATIONAL UNIVERSITY will host two one-day workshops on November 12, 1998 prior to the SESAPS meeting. One will be on *Atomic-Molecular and Optical Physics* chaired by K. Hardy and Y.F. Zhu and the other will be on *Semi-Exclusive Studies of the Hadron Structure with Electrons and Photons* chaired by W. Boeglin and L. Kramer.

TRAVEL TO MIAMI is convenient as Miami is served by major airlines such as American, U.S. Air, and Delta and is at the southern end of I95 and I75 interstate highways.

THE REGISTRATION FEE STRUCTURE HAS BEEN CHANGED. In order to accommodate the electronic submission of abstracts, the executive committee of SESAPS made the following changes in the registration fee structure. It should be emphasized that a member submitting one abstract will save money with the new fee structure. Registration will be \$35.00 for SESAPS and other APS members, \$50 for nonmembers, \$5 for retired physicists and \$15 for graduate students.

Awardee and banquet speakers will not pay the registration or banquet fee. Undergraduate students may register free at the Society of Physics Students' table. Registration will be open at the headquarters hotel from 18:00 to 21:00 on November 12 and will continue each day of the meeting.

A MEETING OF THE SOCIETY OF PHYSICS STUDENTS is also anticipated 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.

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 letter.

NOMINATIONS FOR THE JESSE BEAMS AWARD FOR OUTSTANDING RESEARCH AND THE GEORGE B. PEGRAM AWARD FOR EXCELLENCE IN TEACHING ARE REQUESTED AT THE EARLIEST POSSIBLE TIME, BUT NO LATER THAN MAY 1, 1998. The nomination letter should include appropriate supporting information with no more than three letters of support for each nominee. The materials for the Beams award should be sent to:

Dr. Pierre Sikivie
Department of Physics
University of Florida
Gainesville, FL 32661-2085

The materials for the Pegram award should be sent to:

Dr. Joseph L. Ferguson
Physics Department
Mississippi State University
Mississippi State, MS 39762
JLFA@RA.MSSTATE.EDU

SESAPS members are urged to nominate candidates for these awards, as a large number of candidates generally results in meaningful awards. Last years winners were **Gary Mitchell** of NC State who won the Beams award and **Ray Hefferlin** who won the Pegram award. While on the subject of awards, Ted E. Cook of UNC Wilmington and Ryan Munden of Stetson University won the Marsh White Award for the best paper on undergraduate research at the 1997 SPS meeting at SESAPS.

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 made up of the Executive Committee.

CONGRATULATIONS TO THE ELECTION WINNERS. The new vice chair is Thomas Gallagher of UVA. A new executive committee member who will serve from 1998-2001 is Rodney Piercy of Mississippi State. Larry Cain will continue his dedicated service as treasurer and Joe Hamilton will continue as APS representative. These section officers work hard to make SESAPS work, and they need your support.

The Francis G. Slack Award for excellence in service contributions to physics in the southeast will be established.

The Southeastern Section of the American Physical Society deems it appropriate to create an Award for Excellence in Service Contributions to Physics in the Southeast. The Section now has two awards, one to recognize Excellence in Research in the region (the Jesse Beams Award) and one to recognize Excellence in the Teaching of Physics in the region (the George B. Pegram Award). Physics in the Southeast has experienced a rapid growth since World War II and, in particular, since about 1960, far greater growth than other parts of the nation.

It is appropriate to recognize those who have contributed to that advance. Many people have worked unselfishly to: (a) bring about significant new research facilities in the region, (b) significantly strengthen and raise the stature of particular departments of physics in the region, (c) provide significant leadership and work to strengthen and build the Southeastern Section of the American Physical Society, Sigma Pi Sigma, the Society of Physics Students and other regional organizations, (d) develop physics consortia of universities and/or new research institutions that have benefited the region and the nation, or (e) carry out other service and administrative activities such as organizing major conferences held in the region, international exchanges, public outreach to K-12 and so forth. They have done so on a broad scale that has raised the stature of physics in our region on a national and international scale. The (a)-(e) are recommended criteria for receiving the award.

In short, an award to recognize members of the physics community in our region for significant service and/or administrative activities that have benefited a broad segment of physics and/or the public as outlined above seems most appropriate for SESAPS. The emphasis would be in the breadth of the person's influence on physics in the Southeast, the nation and the world in contrast to other awards recognizing personal research and teaching accomplishments. It is proposed that the award be named for Francis G. Slack, a distinguished Vanderbilt University scientist who was charter member of the Southeastern Section and who contributed significantly to its development.

A LETTER FROM THE PRESIDENT

Colleagues:

With this issue of our newsletter we are initiating a letter from the President of the Southeastern Section, and I am taking this opportunity to encourage your participation at the 65th annual meeting which will be held in November at Florida International University in Miami. In addition to providing an opportunity to present and hear reports of current research results, the section meeting is unique in that it sponsors very popular sessions on the teaching of physics and hosts a Society of Physics Students session on undergraduate research.

I hope you were present at last year's meeting, which was held at Vanderbilt University. Many of those attending took advantage of two popular workshops preceding the meeting, one on radioactive ion beams and the other on condensed matter/free electron laser physics. An impressive array of invited papers was presented in the areas of nuclear physics, atomic and molecular physics, physics teaching, chaos in quantum systems, intense radiation and biological physics; and, there was a special invited session "Physics in the Southeast" which was very well received. Barry Ripin, Associate Executive Officer of APS, attended our meeting and led a session on "Career Opportunities for Physicists", and Laurie McNeil led a panel discussion on "Having Both a Family and a Future in Physics" which was sponsored by the APS

Committee on the Status of Women in Physics. Both were quite popular. As always, the traditional physics demonstration show on Thursday evening was a great success; approximately two hundred people attended even though it involved a trek through the rain. The presentations by undergraduates at the SPS session on undergraduate research were really impressive, and the session was very well attended. I believe there is the potential for two sessions on the presentation of undergraduate research results since there is increasing emphasis on undergraduate research projects and since the section meeting provides an excellent forum for the presentation of these results. Please encourage your SPS chapters to participate in this meeting and to prepare papers describing undergraduate research.

Congratulations again to Gary Mitchell, NC State University, who received the Jesse Beams Award in recognition of his outstanding research accomplishments and to Ray Hefferlin, Southern College, who received the George B. Pegram Award for his outstanding teaching. The executive committee is in the process of establishing an award for service that will be known as the Francis B. Slack Award; Francis Slack was a professor at Vanderbilt University and was a founding member of our section.

The local committee and officers of the section are now working to assemble another attractive meeting in Miami, and I hope you and your students are able to participate.

Sincerely,
Richard R. Patty
Chair, Southeastern Section of APS

THE FOLLOWING INFORMATION WAS GENERATED BY APS TO ASSIST YOU WITH THE PREPARATION OF ELECTRONICALLY SUBMITTED ABSTRACTS

Abstract Submission

The deadline for the submission of all abstracts is Friday, August 29, 1997, 5:00 p.m. EST at the APS Headquarters.

*** The deadline is firm, so don't wait until the last minute! Send early - save yourself the stress.

Electronic Submission

Last year, the APS instituted an electronic abstract submission process, which was an enormous success, with almost 80% of all the abstracts being submitted electronically. We are hoping for an even better turnout electronically this year. There are many advantages to submitting electronically.

- * E-mail message confirming receipt of your abstract
- * E-mail notification of the scheduling of your paper
- * The complete abstract will appear in the electronic version of the program that will
be posted on the APS Home Page, well in advance of the printed program.
(Abstracts
submitted in paper form will have only the title and author listed in

the electronic
program)

For information on how to submit an abstract electronically, send an email message to "abs-info@aps.org" and use the word "info" in the text of your message. To receive the template, send a message to "abs-request@aps.org" and put the words "request <meeting ID>" in the text of your message. The information and/or template will be returned to you by e-mail. If you have particular questions regarding the information, or need assistance, send a message to "abs-help@aps.org".

Submitting electronically is very easy. The mark-up language we use is LaTeX, but you do not need to know LaTeX in order to submit an abstract. Simple ASCII text will suffice, unless you need to put mathematical symbols or Greek characters in the text of your abstract - and most of those instructions are very simple.

Paper Submission

Abstracts received via postal mail will be accepted; however, only the title and authors of the paper will appear in the printed version of the Bulletin and on the World Wide Web version of the Bulletin.

Please follow the instructions for the preparation of paper abstracts as they appear in each issue of APS Meeting News. These abstracts should be sent to:

<Meeting ID or Meeting Name>

Meeting Abstracts

APS Meetings Department

One Physics Ellipse

College Park, MD 20740-3844

Please do NOT also send a paper abstract to APS if you are submitting your abstract electronically. All abstracts must be at the headquarters office by the deadline date. APS assumes no responsibility for mail delays. Receipt of paper abstracts will not be confirmed unless accompanied by a self-addressed, stamped envelope.

Some Electronic Do's and Don'ts

Do not simply "reply" to the address from which you received the abstract template. Send the abstract to "abs-submit@aps.org". Make sure you have the correct meeting ID <Meeting ID>.

One abstract per message! The system is automated. Sending two or more abstracts in one message increases the likelihood that all but the first abstract will disappear into the ether.

Use only one sorting category for your abstract in the "Sort Category" field. In order to sort the papers properly, it is important that the system deal with only one request. If you wish to give additional guidance to those who are putting the program together, please do so in the "Special Instructions" field. The "Sort Category" field has four curly braces. Please use them as follows:

\Sort Category {15}{L}{}}}. **Not** \Sort Category {15L}{}}{}
and not \Sort Category{15}{L}{32}{B}. **Do not remove left over braces.**

Only submit your abstract once. You should receive an e-mail message telling you that we got your message within 24 hours. If you have not, contact "abs-help@aps.org"

Respectfully,

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EXECUTIVE COMMITTEE 1998

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APPLICATION FOR STUDENT TRAVEL SUPPORT TO THE SESAPS MEETING

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____

ZIP: _____

SCHOOL: _____

UNDERGRADUATE/CLASS: _____

GRADUATE/CLASS: _____

ABSTRACT TITLE: _____

ABSTRACT AUTHORS: _____

AMOUNT REQUESTED (\$100 MAX) _____

PURPOSE OF REQUESTED FUNDS: _____

RETURN BY 1 OCTOBER TO:
KENNETH A. HARDY, SECRETARY SESAPS
PHYSICS DEPARTMENT
FLORIDA INTERNATIONAL UNIVERSITY
UNIVERSITY PARK, MIAMI, FL 33199