THAT IS SPS?

The Society of Physics Students (SPS) is a professional association explicitly designed for students. Membership, through collegiate chapters, is open to anyone interested in physics. The only requirement for membership is that you be interested in physics. Besides physics majors, our members include majors in chemistry, computer science, engineering, geology, mathematics, medicine, and other fields. Within the SPS, Sigma Pi Sigma, a nationally recognized scholastic honor society, elects members on the basis of outstanding academic achievement. This two-in-one Society operates within the American Institute of Physics (AIP).

The SPS is essentially a self-governing Society created to serve the interests of physics undergraduate and graduate students. It was formed in April 1968, from the union of the AIP Student Sections and Sigma Pi Sigma. The Student Sections had been established by AIP. Sigma Pi Sigma originated as a local honor society at Davidson College, NC, in 1921.

At present there are over 650 active chapters of SPS on campuses across the country. Approximately 6,000 students take part in the chapter activities, making SPS the fourth largest physics society in the country. Over 450 chapters include the honor society as part of their activities. Total historical membership in Sigma Pi Sigma, including alumni, exceeds 75,000.

TO THE INDIVIDUAL STUDENT

Your SPS chapter is largely autonomous. Only those items specified in the national SPS constitution are limiting factors. The constitution can be amended only on recommendation of the National Council followed by approval from two-thirds of the SPS chapters. Thus SPS is your Society and deserves your active participation and support. We urge you to use your membership in SPS to participate in the physics community, both on your own campus and on the regional and national levels.



The SPS exists to help students transform themselves

into contributing members of the professional community. Course work develops only one range of skills. Other skills needed to flourish professionally include effective communication and personal interactions, leadership experience, establishing a personal network of contacts, presenting scholarly work in professional meetings and journals, and outreach services to the campus and local communities.

Locally, regionally, nationally, and internationally, the SPS offers the opportunity for these important enrichments to the student's experience.

LOCALLY

There are chapter meetings where students may make presentations, invite local guest speakers, plan science outreach programs (such as "Physics Circuses" in local elementary schools, or tutoring services on campus), or organize a departmental picnic or a science film-festival. Chapter meetings are limited only by the imaginations of the members!

SPS members in at least their junior year may apply for SPS Scholarships ranging in amounts from \$4,000 to \$1,000. The chapter may apply for a Marsh White Award and a Sigma Pi Sigma Undergraduate Research Award. The Marsh White Award funds science outreach programs in the local community. The Sigma Pi Sigma Undergraduate Research Award supports research projects conducted by the chapter.

REGIONALLY

The SPS is organized into 18 Zones. At the semiannual Zone meetings, students from many chapters meet to enjoy fellowship, present research papers, tour laboratories, hear nationally known distinguished guest speakers, and exchange ideas on topics of mutual interest, such as ideas for science outreach to grades K-12, or career options besides physics that are open to one with a physics degree. Attending Zone meetings is the most effective way to build and maintain a healthy chapter. AIP and SPS placement services are available to members of SPS. Specific Zone meetings may include a placement center, linking new recipients of BA/BS degrees with potential employers.

NATIONALLY

The policies of SPS are set by the National Council, which is elected by chapters within geographic Zones. Faculty members are nominated by chapters to represent their Zones as Councilors. If elected they will serve for three-year terms. The President of SPS and the President of Sigma Pi Sigma are elected by the chapters for two-year terms. Both Councilors and Associate Councilors participate in Zone activities and in the annual policy-making meeting of the Council. Councilors organize committees within Zones and serve on committees of the National Council.

SPS chapters with a Sigma Pi Sigma chapter award recognition and distinction to students who have achieved high scholarship, by electing them to membership in Sigma Pi Sigma.

INTERNATIONALLY

The SPS sends two to four students per year to represent the USA in the International Conference of Physics Students (ICPS). There are also a few SPS chapters outside the USA.

HAT DOES IT COST?

To cover in part, the cost of the Society's services, members pay annual national dues of \$20.00. Dues for those with non-US addresses is \$30.00. The remaining costs are covered by AIP funds. Members receive a membership card and may purchase lapel emblems or pins. Local dues are set by the individual chapters.

YOU WILL RECEIVE (for \$20.00):

- ◆ Physics Today
- ♦ SPS Observer
- ◆ Journal of Undergraduate Research in Physics
- ◆ Career Placement Service
- Eligibility for scholarships, travel grants, and other awards
- Free membership with one AIP Member Society for <u>UNDERGRADUATES ONLY</u>, for up to three years. (See back panel for listing of AIP Member Societies and their websites.)

HAT IS AIP?

The American Institute of Physics (AIP) was founded in 1931 as a membership corporation of the leading societies in the field of physics. It combines into one operating agency those functions on behalf of physics which can best be done by the societies jointly. Its purpose is the advancement and diffusion of the knowledge of physics and its applications to human welfare. It is a major publisher of scientific journals.

OW IS A CHAPTER FORMED?

All that's needed is a group of interested students, a faculty advisor, and the approval of the physics department to petition for a SPS chapter. Petition forms are available from the National Office. A chapter can be established at any accredited college or university. Only a chapter at a college or university offering a physics major is eligible to form a SPS chapter.

HOW DOES SIGMA PI SIGMA FUNCTION?

Sigma Pi Sigma is a nationally recognized scholastic honor society within SPS. It is a member of the Association of College Honor Societies (ACHS) and is an affiliated society of the American Association for the Advancement of Science. Membership is limited by the national SPS Constitution to individuals who have completed at least three semester courses in physics that can be credited towards a physics major and who are in the upper one-third of their class in general scholarship. Higher standards can be set by local bylaws. A separate pamphlet that describes the honor society is available.

FREE MEMBERSHIP

with one of the following AIP Member Societies for undergraduates only, for up to three years, when you join SPS:

(For a complete listing of benefits for each Society, see the SPS Membership Application.)

THE AMERICAN PHYSICAL SOCIETY (APS)

Promotes the advancement and diffusion of the knowledge of physics and all branches of fundamental and applied physics.

APS Web address: http://www.aps.org

OPTICAL SOCIETY OF AMERICA (OSA)

Devotes itself to the advancement of optics, pure and applied, in all its branches.

OSA WEB ADDRESS: http://www.osa.org

ACOUSTICAL SOCIETY OF AMERICA (ASA)

Seeks to increase and diffuse the knowledge of acoustics and to promote its practical applications.

ASA WEB ADDRESS: http://asa.aip.org

THE SOCIETY OF RHEOLOGY (SoR)

Promotes the advancement and applications of rheology, the science of deformation and flow of matter, and its applications.

SoR WEB ADDRESS: http://www.umecheme.maine.edu/sor

AMERICAN ASSOCIATION OF PHYSICS TEACHERS (AAPT)

Promotes the advancement of the teaching of physics and furtherance of appreciation of the cultural role of physics.

AAPT WEB ADDRESS: http://www.aapt.org

AMERICAN CRYSTALLOGRAPHIC ASSOCIATION (ACA)

Promotes the study of the arrangement of the atoms in matter, its causes, its nature, and its consequences, and the tools and methods used in such studies.

ACA WEB ADDRESS: http://www.hwi.buffalo.edu/aca

AMERICAN ASTRONOMICAL SOCIETY (AAS)

Promotes the advancement of astronomy and closely related branches of science.

AAS WEB ADDRESS: http://www.aas.org

AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE (AAPM)

Seeks to promote the application of physics to medicine and biology.

AAPM WEB ADDRESS: http://www.aapm.org

AMERICAN VACUUM SOCIETY (AVS)

Promotes communication and disseminates knowledge in vacuum science, technology, and engineering.

AVS WEB ADDRESS: http://www.vacuum.org

AMERICAN GEOPHYSICAL UNION (AGU)

Promotes the scientific study of the Earth and its environment in space.

AGU WEB ADDRESS: http://www.agu.org

Society of Physics Students



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SPS is an organization of the