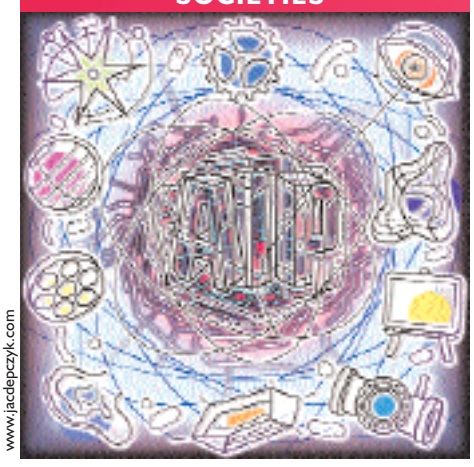


www.jacdepczyk.com

The American Astronomical Society

by Kevin B. Marvel

When the nation's professional astronomers gathered for their third national meeting in September 1899 at Yerkes Observatory in Williams Bay, Wisconsin, they made a decision that proved profound for the discipline's future—they founded the organization that would become the American Astronomical Society (AAS). George Ellery Hale, namesake of the 200-in. telescope at Palomar Mountain Observatory, was instrumental in forming the new group, whose members initially named it the Astronomical and Astrophysical Society of America (AASA).

The Society's original name reflected its commitment to both astronomy and astrophysics, then a new field of research. In 1914, the AASA adopted the name it uses today. Astrophysics, now the primary mode of astronomical research, did not suffer from the simplification.

The AAS is a nonprofit scientific society that promotes the vitality and advancement of astronomy and related sciences through meetings, publications, education, employment services, public-policy work, and grants and prizes. During its first eight decades, the AAS located its executive office on college campuses. However, to foster daily contact with Congress and key government agencies such as the National Science Foundation (NSF) and the National Aeronautics and Space Administration, the Society moved in 1979 from Princeton, New Jersey, to Washington, DC, where it resides today.

From its initial 114 founders in 1899, AAS membership has grown to more than 6,500. Although largely a North American institution, the Society includes about 900 members from countries worldwide. Many of its members also belong to one or more of the Society's five divisions: Planetary Sciences, High Energy Astrophysics, Historical Astronomy, Dynamical Astronomy, and Solar Physics.

The AAS welcomes those from outside academic research. About 40% of its members work in such an environment—in areas that include publishing, research, design, fabrication, and construction. They bring their unique experiences and expertise to those of their academic colleagues and provide vital services to the astronomical community.

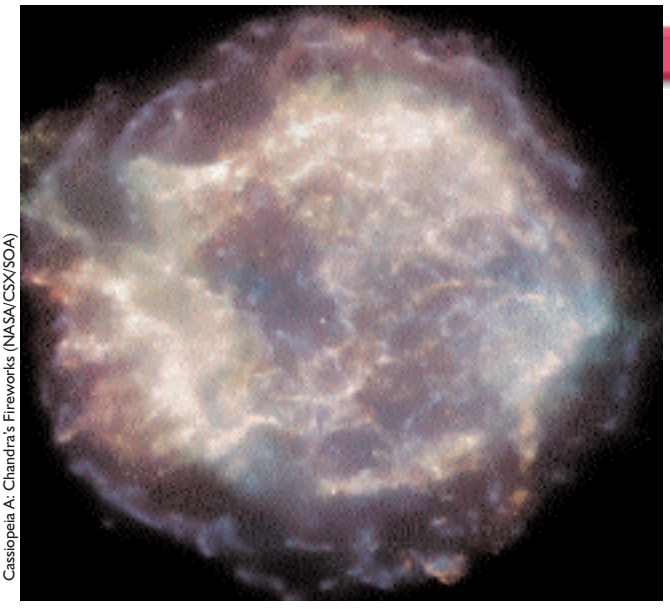
Membership is a good value for individuals or organizations involved with the professional astronomical community. Individual dues range up to $115 annually, and division dues range from an additional $8 to $15 a year. Many membership benefits are available to both individuals and organizations, including a free subscription to *Physics Today*. Full information on AAS membership and benefits is available at http://www.aas.org.

Professional camaraderie draws thousands of astronomers to the Society's twice-annual meetings, where they share exciting scientific results through oral and poster presentations. In fact, the increasing number of presentations at each meeting is a major draw for scientists.

The prospect of new discoveries also entices about 100 journalists to attend AAS meetings. Representing print and broadcast media from around the world, they help the AAS inform the public of the latest findings in astronomy and astrophysics, and of their importance to the quest to know our universe. The AAS also serves as a conduit between the astronomy community and journalists by providing an Internet list server through which universities and other research organizations can send astronomy-related media releases.

The AAS publishes *The Astronomical Journal* (*AJ*), *The Astrophysical Journal* (*ApJ*), *The Astrophysical Journal Supplement* (*ApJS*), and *The Astrophysical Journal Letters* (*ApJL*), the leading U.S. scholarly journals in astronomy. The Society keeps members informed of institutional developments, meetings, and other activities through *The Bulletin of the American Astronomical Society* and the *AAS Newsletter*. It also works to minimize publishing costs and to provide economical ways to transmit and archive astronomical research. In 1995, with a grant from the NSF, the AAS broke ground in electronic

Members of the American Astronomical Society Sarah Neal, an undergraduate astronomy major at Agnes Scott College in Atlanta, Georgia (left), and Jon Morse, a faculty member at Arizona State University in Tempe (right), meet with Representative John Duncan (Republican, Tennessee) as part of the AAS 2003 Congressional Visit Day program to request increased funding for basic research.



Cassiopeia A: Chandra's Fireworks (NASA/CSX/SOA)

publishing by producing an online version of *ApJL*, which reports cutting-edge research. Today, all of the AAS's main publications, including *AJ* and *ApJ*, are available online.

The Society's primary education goal is to foster a scientifically literate public.

Because today's students are tomorrow's scientists and voters, the AAS provides supporting resources to members who teach undergraduate and graduate courses, write education-grant proposals, and participate in outreach programs for K–12 students and the public.

The Director of Educational Activities plans special programs and education workshops for attendees at AAS meetings. The Education Office provides classroom materials to educators, distributes a "Careers in Astronomy" brochure, and links members with K–12 teachers to cultivate an appreciation for astronomy in young people. As learning is a lifelong joy, the AAS supports education outside the classroom, too. In June 2000, the Society launched the AAS Second Century Lecture Series, aimed at bringing fascinating developments in astronomy to the public. It consists of four lectures delivered periodically by renowned astronomers at planetaria, science centers, museums, universities, and other venues nationwide.

The AAS supports professional astronomy by administering prizes and grants. The annual Henry Norris Russell Lectureship, established in 1946, commemorates a lifetime of preeminence in astronomical research. The Newton Lacy Pierce Prize and the Helen B. Warner Prize both recognize significant contributions by young members of the profession. Each of the Society's divisions has its own awards, such as the Carl Sagan Medal, which honors an active planetary scientist for outstanding communication to the general public. In addition, the Beatrice M. Tinsley Prize honors especially innovative research; the Joseph Weber Award for Astronomical Instrumentation is given for instrument development; and the newly established Education Prize is awarded for efforts in astronomical education of the public, students, or the next generation of professional astronomers. The AAS also administers grants from its own funds and outside sources that cover research and travel expenses needed to carry out valuable projects.

The AAS publishes an open, online job register monthly—the primary means of advertising job openings in astronomy. The Society and its divisions hold professional development seminars and discussion sessions at their meetings. The AAS also sponsors a job center at every meeting to connect recruiters and job seekers. An online Industrial Astronomers Database allows graduate students to find and query astronomers working in nonacademic environments—an informal network that has proved useful to early-career astronomers who decide to pursue careers outside academic research.

According to the American Institute of Physics' Society Membership Profile 2002, 10% of the U.S. resident members of the AAS work in industry or are self-employed, 12% hold government positions, 14% work at federally funded R&D centers, and 5% are employed in the nonprofit sector. These percentages compare with the 59% of U.S. resident members employed in the academic sector. Clearly, the AAS is not a society for academic researchers alone.

By satiating our human curiosity, developing new technology for industry, and complementing progress in other scientific disciplines, professional astronomy has proven worthy of public investment. The AAS public-policy programs strive to nurture public commitment at a level that allows U.S. astronomers to remain leaders in their fields.

As we learn more about the universe, we are constantly amazed by its complexity. Each new piece of knowledge produces new lines of research. Before the launching of satellites to monitor atomic bomb testing, for example, gamma rays from astrophysical sources were unknown. Now gamma-ray astronomy is an active field of inquiry.

Seeing into the future

What will the future bring for astronomy? New telescopes, instruments, and theories will certainly expand our knowledge of the universe. By 2050, we will have images of planets, perhaps some resembling Earth, orbiting other stars. We may also have determined the nature of dark matter and the newly discovered dark energy, which are fundamental constituents of the universe. We will continue to unravel the intricacies of stellar birth and death, and may better understand how this cycle influenced the formation of Earth and, ultimately, ourselves.

Astronomy will continue to speak to a deep, inner portion of the human experience. Nobody can look up at a dark country sky and not feel awe, or fail to wonder at the dazzling picture that nature paints there each night. Astronomers help us understand the objects and processes we see, giving us a sense of place within the grandness of the cosmos.

The AAS will continue playing a central role in astronomical research by facilitating the exchange of information between astronomers and the public, supporting the drive to find out more about the universe, and convincing the public of the inherent value of scientific research.

BIOGRAPHY

Kevin B. Marvel is deputy executive director of the American Astronomical Society in Washington, DC (marvel@aas.org).