Newsletter 113 ✍ December 2002

NEWSLETTER

The American Astronomical Society ✍ 2000 Florida Avenue, NW, Suite 400 ✍ Washington, DC 20009-1231 ✍ 202-328-2010 ✍ aas@aas.org

HONORED ELSEWHERE

Giacconi and Davis Awarded the 2002 Nobel Prize in Physics

"For pioneering contributions to astrophysics, in particular for the detection of cosmic neutrinos," AAS Member **Raymond Davis, Jr.** of the University of Pennsylvania (ret.) and formerly of Brookhaven Laboratory and Masatoshi Koshiba of the University of Tokyo each share half of the 2002 Nobel Prize in physics. The other half of the prize in physics was awarded to AAS Member **Riccardo Giacconi** of the Associated Universities, Inc. (AUI) and Johns Hopkins University "for pioneering contributions to astrophysics, which have led to the discovery of cosmic X-ray sources."

Complete story on page 15

2002-2003 AAS Election

The December issue of the *Newsletter* is largely dedicated to providing members with information about the candidates standing for election for a number of important AAS offices.

Please read the candidate statements carefully and vote on the ballot enclosed in this issue. Sign the enclosed envelope to validate your vote, insert your ballot and mail the ballot so that it is received in the Office of the Secretary by **31 January 2003**.

Candidate statements begin on page 4

The audit of 2001 AAS finances was completed too late for inclusion in the *Newsletter*. Financial information will be published in the "Annual Report of the AAS," *BAAS*, V. 34, N. 4, 2002, and at http://www.aas.org/publications/baasindex.html.

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PRESIDENT'S COLUMN

Caty Pilachowski, catyp@astro.indiana.edu

Decadal Surveys are big news in astronomy!

Since *Astronomy and Astrophysics in the New Millennium* was issued in 2001, two additional decadal surveys in related areas of research have been completed. *New Frontiers in the Solar System: An Integrated Exploration Strategy*, a decadal survey of directions in solar system exploration, was chaired by Michael Belton and released in July, 2002. The survey recommends high priority for an exploratory mission to the Kuiper Belt, including a visit to Pluto and Charon, as well as shared NSF and NASA support for the Large Synoptic Survey Telescope, to ensure that it accomplishes its prime solar system objectives.

The Sun to Earth—and Beyond: A Decadal Research Strategy in Solar and Space Physics, chaired by Louis Lanzeroti and also released this year, supports Solar Probe, a mission to within four solar radii of the solar surface, and technology development for the Advanced Technology Solar Telescope.

In addition, *Connecting Quarks to the Cosmos: Eleven Science Questions for the New Century*, an assessment of strategies for science at the interface between physics and astronomy, chaired by Michael Turner and released in April 2002, maps out a new cross-disciplinary, interagency research strategy for physics and astronomy to answer the most profound questions about the cosmos in the coming decades.

Each of these surveys inspires us with the scientific challenges and opportunities of the next ten years, and each lays out carefully considered and prioritized plans for major science initiatives to achieve those goals. Together, these surveys convey a broad vision for astronomy, astrophysics, and space science, a vision defined by consensus through wide community participation. These surveys also give us a rare opportunity to bring the vision of astronomy forward on the national stage.

Many of our Congressional representatives recognize the value of basic research to the nation's vitality, and many support significant increases in the NSF and NASA research budgets to assure continued scientific leadership and economic health. Many also recognize the significance of new discovery and new frontiers to our national well-being, and the value of astronomy and space science for technology development and for developing and maintaining a technologically competitive workforce. These members of Congress need our support.

As this is written, the NSF and NASA budgets for FY2003 are not yet completed, and the outcome remains unclear – will the Congress undertake to double the NSF budget in the next five years, or will basic research continue to be squeezed? To achieve the grand visions of our decadal surveys, we must take part, not only in prioritizing and carrying out the missions, and conducting the research, but also in the national dialogue on the importance of federal support for basic research.

Continued on the next page

LETTERS TO THE EDITOR

Letters to the Editor on current issues of importance to astronomers are welcomed. Letters must be signed and should not exceed 250 words. Letters must be received by Jeff Linsky, Associate Editor, Letters, no later than one week prior to the *Newsletter* deadline. You may contact Jeff Linsky by email jlinsky@jila.colorado.edu, Tel: 303-492-7838, or FAX: 303-492-5235. The Associate Editor may edit letters, but will consult with authors before doing so. Letters will be published at the discretion of the Editors.

A Request for Sky Spectra at Interesting Times

Dear Editor:

We are interested in obtaining sky spectra associated with periods of intense solar flares. We are atmospheric physicists, who have for several years been studying the terrestrial nightglow with the aid of sky spectra donated by astronomers using the Keck I and II telescopes, our initial collaborator being Don Osterbrock [http://www-mpl.sri.com/projects/pyu02424.html, http://www.nvao.org/NVAO/docs/flyer.html].

Of recent solar flares, two of the strongest on record are the Bastille Day event (11–18 July 2000), and the event of the week of 29 March–6 April 2001. We would like to obtain spectra in the 3200-10000 Ä range, with resolution better than 20,000. For nightglow studies, we believe that the resolution and spectral coverage of large CCD echelle spectrometers would provide the required sensitivity.

If you are in possession of sky spectra for these two time periods, we would be most appreciative if you could share them with us. Our address is Molecular Physics Laboratory, SRI International, Menlo Park, CA 94025.

Tom Slanger (tom.slanger@sri.com)

David Huestis (david.huestis@sri.com)

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POSTMASTER: Send address changes to AAS, 2000 Florida Avenue, NW, Suite 400, Washington, DC 20009-1231.

Items of general interest to be considered for publication in the *Newsletter* should be sent to lscholz@aas.org. Appropriate pictures are welcomed. Further information about deadlines and submitting articles, see http://www.aas.org/publications/newsletter.html.

Items submitted for the *AAS Newsletter* are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to ela@aas.org.

AAS Publications Coordinator: Judy Johnson
Editor: Robert W. Milkey
Associate Editor: Lynn Scholz
Associate Editor, Letters: Jeffrey Linsky, U. Colorado

PRESIDENT'S COLUMN
Continued from page 1

Which brings me to AAS *ACTION ALERTS* and the Committee on Astronomy and Public Policy: while we are busy pushing back the frontiers of knowledge, CAPP and AAS Deputy Executive Officer Kevin Marvel are keeping an eye on Washington. *ACTION ALERTS* are issued when your support is critically needed, and can make a difference.

Write your Congressmember to tell him or her how you feel about support of basic research. Tell them about the significant Decadal Surveys and strategic plans produced by the astronomical community, about the discoveries that await us, and about the importance of federal support to make those discoveries happen.

Only a handful of letters can change a Congressmember's or Senator's vote on a critical bill, and AAS *ACTION ALERTS* give you the who, when, what, and why to make it easy.

So when that *ACTION ALERT* hits your inbox, flex those fingers and start typing!

Member Deaths Noted

Since the October *Newsletter*, the Society is saddened to learn of the deaths of the following members, former members and affiliate members:

Franklyn M. Branley
Andreas G. Ekholm (Division Affil.)
Preston F. Gott
Jesse L. Greenstein
Pearl R. Lichtenstein
Christof Litwin
David Q. Wark
David T. Wilkinson
Kenneth O. Wright

Manuscript Submissions using AASTeX

The *AJ* and *ApJ* accept manuscripts electronically that are prepared using the AASTeX manuscript package. Following are some important addresses for obtaining information about AASTeX and electronic manuscript submission.

AASTeX Homepage:

http://www.journals.uchicago.edu/AAS/AASTeX/

User Support:

aastex-help@aas.org

Journal Homepages/Manuscript Submission:

AJ, ApJ, ApJL:

http://www.journals.uchicago.edu/ApJ/information.html

PUBLISHING

HOLIDAY IDEA: Order the "First Century" and Save

For the holidays, we are offering David DeVorkin's history of the AAS, *The American Astronomical Society's First Century*, at a price designed to sell-out our remaining copies.

In addition to our close-out price of $20 per copy, we are offering free shipping anywhere in the continental US (add $10.00 for overseas orders).

A perfect gift idea for your colleagues at a savings of $15 over the original cost.

To order, contact Frances Rotenberry at frances@aas.org or print out the order form at http://www.aas.org/forms/centorder.pdf

WHO SERVED US WELL ...

Jesse Greenstein Dead at 93

Jesse L. Greenstein, astrophysicist at the California Institute of Technology, Member of the National Academy of Sciences, and 1970 Russell Lecturer died on 21 October 2002 from complications from a hip fracture. He is particularly known for his investigations of white dwarfs, M dwarfs, and the molecular composition of stars and for having founded the astronomy program of Caltech in the 1940s. Greenstein was a Councilor of the AAS from 1947-1950 and Vice-President from 1955-1957.

Jesse L. Greenstein, 1909-2002.
Photo courtesy of the Calififormia Institute of Technology

Editor's note: While it is not our policy to publish obituary notices in the Newsletter, *the Council has determined that in the case of past AAS Presidents and Russell Lecturers, a brief notice shall be published to be followed by the usual tribute in the last number of the* BAAS.

Changes Ahead in Publications

Dear Reader,

In spite of the plummeting stock market, I am going to take the big leap into retirement starting in the New Year.

This means that I will perhaps have enough time to attend to my garden and my bees in Washington, DC; to take some trips to great fishing and birding spots; and even to work in a few trips to Italy.

These are pleasant prospects, indeed.

However, this also means that I will be distanced from some treasured working relationships in the astronomical community and here at the AAS Executive Office. I owe a great deal to these relationships, and particularly to Peter Boyce and Robert Milkey for introducing me to these experiences.

Shortly, the publications department here will be welcoming a new staff member, **Crystal M. Tinch**, who will be taking over the *Newsletter* and the *Directory* projects. She has excellent skills and temperament and I'm confident that you will all enjoy working with her.

So, until I surprise you at some future AAS meeting, thanks for the ride. The stars will never look the same.

Lynn Scholz

Consider Hosting an AAS Second Century Lecture

Neta A. Bahcall, Chair, AAS Second Century Lectures

The AAS Council established a public lecture series to commemorate the second century of the Society and to bring the fascinating developments in astronomy to the attention of a large public. Since its inception in 2000, the AAS Second Century Lecture Series has been a great success. Typically four Public Lectures are scheduled per year, at sites that include science museums, planetaria, convention centers, colleges and universities. Thousands of people have enjoyed these lectures and come away enthusiastic about astronomy as well as stronger supporters of basic research in our field. You can find a list of previous AAS Second Century Lectures at http://www.aas.org/special/centlecture.html

I would like to encourage you to host one of these exciting talks at your home institution or at another institution in your geographical area.

The Century Lectures are given by some of our most outstanding scientists and lecturers and provide an opportunity to make the public aware of the enormous progress that is being made in astronomy. Previous lectures have covered such diverse topics as the discovery of extra-solar planets, a deeper knowledge of ordinary stars, the mysteries of black holes, orbiting pulsars and GR, dark matter, gravitational waves, and the beginning, expansion, and future of the universe.

The AAS supports advertising for the lectures and some local expenses if needed, as well as travel expenses for the lecturer. The local host is responsible for making the local arrangements.

If you would like to host an AAS Second Century Lecture, please contact me at neta@astro.princeton.edu (or Neta Bahcall, Astronomy Dept., Princeton University). Also, if you have a suggestion about a particularly exciting topic, or a particularly good venue for a lecture, please let me know. This lecture series is one way we can let the public know how much fun astronomy can be for everyone.

CANDIDATE STATEMENTS

FOR PRESIDENT
(Vote for ONE)

Candidates:

Neta A. Bahcall
Robert P. Kirshner

Duties of the President

- Presides over Council meetings;
- Serves on the Council as President-Elect, President and Past-President;
- Presides over the Annual Business Meeting;
- Chairs Executive Committee
- Represents the AAS at official functions and before other organizations;
- Serves when required as official spokesperson for the AAS;
- Appoints members to various AAS committees.

Current President:

Catherine Pilachowski

Neta A. Bahcall

Affiliation: Princeton University Department of Astrophysical Sciences.

Position: Professor of Astrophysics.

PhD: Tel-Aviv University, 1970.

Areas of scientific interest: Clusters of galaxies, large scale structure, dark matter, quasars and AGN's, globular clusters, X-ray sources, and observational cosmology.

AAS positions and dates: Chair, AAS Committee on the Status of Women in Astronomy, 1983; Councilor, 1987-1990; AAS Membership Committee, 1987-1990; Vice-President, 1995-1998; *ApJ* Editor Search Committee, 1998; USNC-IAU, 1998-present; Chair, AAS Second Century Lecture Series, 1999-present; AAS Century Lecturer, 1999-present.

Other experience and positions relevant to service in the AAS: Director of Undergraduate Program in Astronomy, Princeton University, 1992-present; Chief, General Observer Branch, and Head, Science Program Selection Office, Space Telescope Science Institute, 1983-1989; Chair, HST TAC, 1994; Space Telescope Science Institute Council, 1993-1997; Chair, SIRTF Science Center Oversight Committee, NASA, 1998-2001; Director, AURA Board, 1990-1995; Policy Opportunities Panel, Astronomy and Astrophysics Survey for the 1990s; Committee on Coordination of Ground-Based and Space-Borne Observatories, 1985-1986; AIP Committee on International Relations, 1990-1993; Director, Council on Science and Technology, Princeton University, 2000-present; Director, Teaching Postdoctoral Fellowship Program in Science and Engineering, Princeton, 2000-present; Member, National Academy of Sciences; various NASA, NSF Committees (policy, funding, science).

Statement: The AAS is our extended family. We must encourage a feeling of unity and participation among all members of the family — those from small and large institutions, from teaching, research, and industry centers, national and private institutes, men and women, students and faculty. We need to make sure our meetings represent quality time for all of us, with the best science presented from every discipline within the AAS. Our journals are our enduring contribution to astronomy; they must be continually revitalized in the electronic revolution. Astronomy is under-funded. We must all work together to correct this situation. We must make sure that the decision makers in NASA, NSF, DOE, Congress, and OMB appreciate the spectacular new results being obtained with ground based telescopes that have fantastically improved instrumentation, with gamma-ray, X-ray, ultra-violet, optical, and infrared telescopes in space, and from advanced analytic and computational studies. We need to lobby aggressively for more research funding for astronomy and to implement the recommendations of the decadal survey (the McKee-Taylor report). We must help expand job opportunities in academia and industry, especially for young scientists and those in dual-career situations. Education and public outreach must become an even larger part of our activities. The future of astronomical research, the strength of our economy, and the intellectual and cultural life of the citizenry can all be well served by an intensified effort to make the excitement of astronomy available to the curious of all ages. We need to enhance our interactions with our international sister societies and with our colleagues in physics, geology and other sciences; we will all benefit from such interactions.

I have enjoyed my responsibilities as chair of the Status of Women Committee, as an AAS councilor, vice-president, and, currently, chair of the AAS Second Century Lectures. I would love to help make everyone feel like family in the AAS.

Robert P. Kirshner

Affiliation: Harvard-Smithsonian Center for Astrophysics

Position: Clowes Professor of Science, Harvard University.

PhD: Caltech, 1975.

Areas of scientific interest: Supernovae, extragalactic astronomy, observational cosmology.

AAS positions and dates: Councilor, 1985-1988.

Other experience and positions relevant to service in the AAS: AURA Board, 1989-1995; AURA Observatories Committee, 2000-present; Gemini Board, 1995-1997; Magellan Council, 1998-present; AUI Trustee, 2000-present; NGST Ad Hoc Working Group, 1999-2001; National Academy of Sciences, 1998-present; NAS Publications Board, 1998-present.

Statement: Looking in the mirror I can hardly believe I am wise enough or distinguished enough to be a candidate for president of the AAS. My only real qualification is that I have always tried to do what I can to advance astronomy. Most of those actions have been simple ones: doing research on supernovae and the accelerating universe, helping graduate students and postdocs grow into valued colleagues, teaching undergraduates (some eager, some compelled), and giving public talks to communicate the joy of this work. I've helped build institutions, as an Astronomy Department chair at Michigan and at Harvard, and as an associate director at the Center for Astrophysics. On the national scene, I have helped govern NOAO, the Hubble Space Telescope, the Gemini Telescopes, and the Magellan Observatory, and helped us all take the first steps toward NGST. I have always tried to emphasize our common interests, to keep the big picture

in view, and to speak clearly for the intrinsic value of science, not just as a proxy for technological development that creates economic growth, but as a valuable activity in itself.

The AAS is an important organization for us as astronomers, helping with our personal, institutional, and national roles. But the most important function of the AAS, through its meetings, journals, and actions, is to help nourish our deep desire to learn what the world is and how it works. If you elect me, I'm sure I'll age rapidly, and eventually fit my vision of a society president.

FOR VICE-PRESIDENT (Vote for ONE)

Candidates:

Chris D. Impey
Colin A. Norman

Duties of a Vice-President:

- Serves on Council;
- Responsible for selecting invited speakers for AAS meetings;
- Responsible for overall scientific content of AAS meetings;
- Two senior Vice-Presidents serve on the Executive Committee.

Current Vice-Presidents:

Robert E. Williams*
Joseph A. Burns
Pierre Demarque
* *term expires June 2003*

Chris D. Impey

Affiliation: University of Arizona.

Position: University Distinguished Professor.

PhD: University of Edinburgh, 1981.

Areas of scientific interest: Observational cosmology, quasars and active galaxies, the IGM, low surface brightness galaxies, gravitational lensing, properties of dark matter.

AAS Positions and Dates: Shapley Lecturer, 1993-present.

Other experiences and positions relevant to service in the AAS: KPNO TAC, 1994-1997; HST TAC, 1995, 1998; Chandra TAC, 2000; NASA and NSF review panels; Space Telescope Users Committee, 1999-2002; Astronomy Education Review Editorial Board, 2002; Biosphere-2 Advisory Board, 1999-2002; Associate Director of Arizona NASA Space Grant, 1995-2001; NSF Distinguished Teaching Scholar, 2002.

Statement: The primary function of an AAS Vice President is to maintain the scientific quality of the meetings of the Society. This task is facilitated by the abundance of talented researchers in our field, and by the rapid progress that is spurred by new telescopes, advances in instrumentation, and increased computational power. I would seek to maintain a balance between disciplines and to spread the demographic base of speakers toward young astronomers. Invited speakers should be chosen with a view to their ability to reach a wide audience. Astronomy has an exciting "story to tell," whether it is the search for sites for life, or the life story of stars, or the early history of the universe. Our federal funding will depend in part in how well we can inspire and educate both legislators and the general public. As astronomy moves increasingly toward large and expensive projects, we must not neglect our human capital. I would work to ensure that AAS meetings continue to address the issue of professional development. We must also continue our dialogs on how to improve astronomy education at all levels, and on how to increase the support for researchers who also commit themselves to teaching and outreach.

Colin A. Norman

Affiliation: Johns Hopkins University/Space Telescope Science Institute.

Position: Professor of Physics & Astronomy.

PhD: Oxford University, 1974.

Areas of Scientific Interest: Astrophysics.

AAS Positions and Dates: None.

Other experiences and positions relevant to service in the AAS:

Statement: The AAS is an important part of the great strength and depth of research in astrophysics and astronomy in the United States. AAS meetings are a showcase for many of the remarkable new discoveries in our flourishing field. There are increasing ties to discoveries in other fundamental research areas such as physics and biology. Intense discussion is given to a wide range of future space-based and ground-based projects. The interpretation of recent discoveries via theoretical astrophysicists' efforts in modeling and physically understanding is also essential. Continuing these important discussions of major aspects of the Society at AAS Meetings and related activities are a principal goal.

To continue the great effort and success in astronomy and astrophysics over the last few decades, we need to ensure that there are ample opportunities and satisfying career paths for the diverse group of talented young people entering the field. This includes not only the straight academic tenure-track positions but also other essential tracks such as the crucially important parallel research track scientists. In many cases, such as at STScI, for example, it is often the research scientists who ensure that the instruments are well built and work to nominal specifications.

The AAS does very well in using the inspirational aspects of recent astronomical discoveries for educational purposes and to inform the general public about science. This has been a very successful and a significantly increasing effort over the last decade or so. Continuing to enhance our emphasis of these issues to as wide an audience as possible is of great benefit to all.

Continued on the next page

CANDIDATE STATEMENTS
Continued from previous page

FOR COUNCILOR
(Vote for no more than THREE)

Candidates:

Todd A. Boroson
Gregory D. Bothun
Carol A. Christian
Harold A. McAlister
David R. Silva
Alycia J. Weinberger

Duties of Councilors:

- Serve as part of the governing board of the AAS; and
- Have the legal responsibility to help make all decisions to manage, direct, and control the affairs and property of the Society.

Current Councilors:

Charles J. Lada*
Dimitri M. Mihalas*
Ellen G. Zweibel*
Thomas R. Ayres
Dana E. Backman
Susana Lizano
Bruce W. Carney
Christopher Sneden
Jean H. Swank
** terms expire June 2003*

Todd A. Boroson

Affiliation: National Optical Astronomy Observatory.

Position: Deputy Director.

PhD: University of Arizona, 1980.

Areas of Scientific Interest: QSO's, stellar populations, instrumentation, public policy.

AAS Positions and Dates: None.

Other experiences and positions relevant to service in the AAS: US Gemini Project Scientist, 1994-2000; Member, CAA, 1997-2000; Member, McKee-Taylor Decadal Survey Committee (AASC), 1998-2000; Co-organizer, First Workshop on Ground-Based O/IR System, 2000.

Statement: Why would I vote for someone to be a Councilor of the AAS?

Because I thought that they:

- could understand and represent my point of view:
  I have held positions at public and private universities and at public and private research centers. I have written proposals, sat on, and chaired review panels. I represented the perspective of NOAO and its users on the McCray committee and the perspective of ground-based O/IR astronomers on the AASC.
- had an interest in AAS activities:
  I am keen to see the AAS develop more clout, while continuing to serve the needs of its membership. I have attended many AAS meetings, and I enjoy the broad mix of science, policy, and technical innovation.
- had an interest in issues affecting the community:
  I worked closely with the policy panel of the decadal survey to develop a mission/vision for NOAO that would make it a more effective element of the national and world-wide astronomy scene. As US Gemini Project Scientist I spent 6 years organizing community discussions and advocating the US perspective.
- had experience organizing meetings and other public activities:
  I have organized and helped to organize a number of meetings and workshops.

Gregory D. Bothun

Affiliation: University of Oregon.

Position: Professor of Physics.

PhD: University of Washington, 1981.

Areas of Scientific Interest: Extragalactic astronomy.

AAS Positions and Dates: Astronomy Education Board, 1999-present; *ApJ* Scientific Editor, 1996-2002.

Other experiences and positions relevant to service in the AAS: NAS Decadal Panel: Policy & Education.

Statement: I believe that Moore's Law will strongly affect future research and teaching in astronomy. Simply put, much original astrophysical research will be done not at the focal plane of a telescope, but in the Terra byte archives that the coming age of high throughput digital astronomy will produce. In turn, such "on demand" data will facilitate the integration of research and teaching so that both the training of graduate students and the use of elementary astronomy as a vehicle for science literacy will evolve. I think this data overload future represents an interesting challenge to the AAS to help ensure program continuity and productivity among its membership. In the past, I have had little interest in governance issues within the AAS, but I strongly believe that times are rapidly changing and this new set of challenges and opportunities intrigues me.

Carol A. Christian

Affiliation: Space Telescope Science Institute.

Position: Scientist: Head, Development, Technology, and Innovation.

PhD: Boston University, 1978.

Areas of Scientific Interest: Stellar populations, galactic evolution, star clusters (technical/other interest: information technology, education, public understanding of science).

AAS Positions and Dates: AAS Education Council, 1997-2000.

Other experiences and positions relevant to service in the AAS: Head, Office of Public Outreach Space Telescope Science Institute, 1995-2000; NASA Group Achievement Award: Education Resource Directory, 2001; NASA Science Team Achievement Award, 2001; SIRTF Community Working Group, 1995-1999; Chair of SIRTF Archive Working Group, 1995-1999; NASA OSS Education Council, 1997-2000; Chair of NASA Education Resource Archive/Catalog Group, 1998-2000; SOFIA Education Advisory Group, 1998-2000; Adler Planetarium Advisory Committee, 1998; NASA Langley Data Analysis Archive Center User Group, 1999-present; Bishop Museum Exploration Exhibit Advisory Group, 1997-1999; Guest Observer and Archive Manager for Extreme Ultraviolet Explorer Mission, Berkeley, 1989-1995; NASA

Education Implementation Task Force, 1994-1997; Chair NASA Science Operations and Mission Operations Working Group, 1992-1995; NASA Astrophysics Working Group, 1992-1995; American Association for Computing in Education, member 1996-present; Astronomical Society of the Pacific (member); IRAF Users Group, 1988-1993.

Statement: The AAS represents a collective voice of the astronomical community. In light of recent encouraging news regarding federal science funding, the AAS is well positioned to promote achievement of our community objectives expressed in the Decadal Report. Realistically though, we know that the landscape can transform quickly, for example, we saw national events focus attention on domestic security as well as health and public welfare issues. We compete with those public concerns. Research budgets can tighten, limiting the opportunities for acquiring support for large projects, for the sophisticated facilities we need and for significant individual research. We need an agile, effective response to such changes.

I bring experience with the influence public understanding of science can have on formulation of public policy, and therefore, funding. Happily, astronomy research still deeply resonates with some of the most fundamental questions people ask. Our discipline inspires and enlightens. We have a unique platform for contributing to science literacy and comprehension through educational and public information programs and thereby nurturing the public's vested interest in our science. As your Council representative, I would embrace the opportunity to help the AAS continue advocating sensible strategies to achieve our research goals and educational responsibilities.

Harold A. McAlister

Affiliation: Georgia State University.

Position: Regents' Professor of Physics & Astronomy and Director, Center for High Angular Resolution Astronomy (CHARA).

PhD: University of Virginia, 1975.

Areas of Scientific Interest: Speckle interferometry, long-baseline optical interferometry, binary stars, fundamental properties of stars.

AAS Positions and Dates: Member then Chair, Warner & Pierce Prize Committee, 1993-1994.

Other experiences and positions relevant to service in the AAS: Chaired Local Organizing Committees for Atlanta AAS Meetings in 1992 & 2000, Shapley Lecturer (from about 1990 to 2001, presently on "sabbatical").

Statement: Through its meetings, journals, newsletters, member services and advocacy, the AAS is the common thread uniting North American astronomers. The Society adds tremendous vitality to astronomy and is fundamental to the near and long-term advancement of our science. The AAS plays a particularly beneficial role in launching the careers of young astronomers and in providing a forum for advancing the status of under-represented groups of scientists. While I would be honored to provide my services as a councilor in support of all the Society's activities, I am particularly keen on areas related to the advancement of the next generation of astronomers and enhancing the public's level of scientific sophistication in an age when there has never been a larger gap between scientific achievement and popular superstition. The lure and appeal of astronomy makes it the science with the greatest public access, and we owe it to the taxpayers who finance our activities to better communicate to them and to their children what we do with their dollars.

David R. Silva

Affiliation: European Southern Observatory.

Position: Associate Astronomer.

PhD: University of Michigan, 1991.

Areas of Scientific Interest: Extragalactic stellar populations, elliptical galaxies.

AAS Positions and Dates: None.

Other experiences and positions relevant to service in the AAS: NOAO/KPNO staff member, 1991-1996; WIYN Project Manager, 1994-1996; Project Scientist, NOAO WIYN Queue Observing Experiment, 1995-1996; ESO/Garching staff member, 1997-present; Head, ESO User Support Group, 1997-2001; Head, ESO Data Flow Operations Group, 2001-present.

Statement: Cartoons notwithstanding, astronomers are not misty-eyed romantics in white coats staring through telescopes. We are teachers, students, parents, children, managers, workers, all on the cutting edge of information technology and globalization. My own career has encompassed all of these things, with an added international flavor: I am an American working in a European setting. As a result, I have developed a diverse personal and professional relationships throughout the North American, European, and Chilean astronomical communities.

I want to use my experience and perspective on the AAS Council in three specific ways: (1) to support international collaborations at all levels of our profession, including AAS membership and meeting participation; (2) to work for a strong American astronomical instrumentation program, especially for ground-based observatories, to maximize the scientific return from international investment in observatory infrastructure development; and (3) to help maintain the success of Society meeting — those grand town squares of our profession — by encouraging meeting participation from a broad range of subdisciplines, nationalities, and career paths. Our Society meetings are not only the most diverse inter-disciplinary astronomy meetings in the world, but also provide a critical focal point for our other important tasks: outreach, education, professional development, cross-discipline communication, funding agency lobbying, and shared vision development.

Alycia J. Weinberger

Affiliation: Carnegie Institution of Washington, Department of Terrestrial Magnetism.

Position: Research Staff Astronomer.

PhD: Caltech, 1998 in physics.

Areas of Scientific Interest: Star and planet formation; circumstellar disks.

AAS Positions and Dates: None.

Other experiences and positions relevant to service in the AAS: NASA Origins Subcommittee, 2001-present; Member, NASA Astrobiology Institute, 2000-present; SIRTF Legacy Program Review Panel, 2000.

Statement: I believe the most important function the AAS has to offer the American astronomical community is a strong voice to our government on the interests of astronomers. This means communicating the importance of basic scientific research and the funding that goes with it to Congresspersons and the Administration and rallying astronomers to defend science funding at critical times. I represent the youngest generation of

Continued on next page

COUNCILOR CANDIDATE STATEMENTS
ALYCIA WEINBERGER continued
Continued from previous page

professional astronomers. We are the lucky heirs to a century of strong astronomical research, but we cannot afford to be complacent about future funding. As a resident of the Washington DC area, I am in a position to help AAS with government outreach. I think our second most important function is to enhance the quality of scientific discourse in astronomy. We should carefully monitor the health of our journals and our annual meetings to insure that exciting results can be reported in a timely, convenient, and peer-reviewed manner to fellow astronomers.

USNC-IAU, Category I (Vote for ONE)

Candidates:

Geraldine J. Peters
Yervant Terzian

Duties of the AAS Representative to the US National Committee of International Astronomical Union (USNC-IAU):

- Responsible for making decisions regarding the US participation in the IAU;
- Recommends astronomers for IAU membership;
- Reviews IAU Travel Grant applications; and
- Represents the US at IAU General Assemblies.
- Current Representatives:

Current Representatives:

James W. Liebert*
Ramesh Narayan
Ronald J. Allen
** term expires at the end of 2002*

Geraldine J. Peters

Affiliation: Space Sciences Center & Department of Physics & Astronomy, University of Southern California.

Position: Research Professor.

PhD: UCLA, 1974.

Areas of Scientific Interest: Stellar astrophysics, especially circumstellar material and winds in early-type stars, Be stars, interacting binary systems, and chemical abundances and evolution of early-type stars.

AAS Positions and Dates: Harlow Shapley Lecturer, 1989-present.

Other experiences and positions relevant to service in the AAS: Board of Directors, Astronomical Society of the Pacific, 1984-1987; Service on 16 NASA/NSF peer review panels, chair twice (programs include IUE, EUVE, HST, ADP/LTSA, SARA, and SAA), 1987-present; Editor-in-chief, Be Star Newsletter (published for the IAU Working Group on Active B Stars, Divisions IV & V), 1987-present; Scientific Organizing Committee, IAU Working Group on Active B Stars, 1985-1991.

Statement: Perhaps one of the most important duties of a representative to the USNC-IAU is the selection of the astronomers that the US will propose as new IAU members at the forthcoming IAU General Assembly. Since the all time high in 1979, the percentage of IAU members from the US has steadily decreased from 30% to 26.5%. Today only 56% of the full members of the AAS are also IAU members. I think that one of the problems is that many AAS members need more information on the organization of the IAU and its wide range of ongoing activities in order to assess just how they might contribute. To encourage a larger number of AAS members to apply for IAU membership, if elected I will work with the AAS to provided this information, in addition to the basic requirements for IAU membership that accompany the application form. I would like to see the younger members of the AAS consider IAU membership as one of their future goals and a wider participation of both new and current IAU members in the activities of the various IAU Commissions. With increased membership and service in the IAU Commissions and Working Groups, the interests of the US astronomers will be better represented and at the same time we can continue to build fruitful collaborations with our international colleagues. As an IAU member for 23 years, I have interacted with many international colleagues and become quite familiar with the operational aspects of the IAU. With this experience, as a member of the USNC-IAU, I would strive to achieve a renewed interest in the IAU and enthusiastically promote the interests of US astronomers at IAU meetings.

Yervant Terzian

Affiliation: Cornell University.

Position: The David C. Duncan Professor in the Physical Sciences.

PhD: Indiana University, 1965.

Areas of Scientific Interest: Interstellar medium, planetary nebulae, radio astronomy.

AAS Positions and Dates: Harlow Shapley Lecturer since program's inception.

Other experiences and positions relevant to service in the AAS: AAS Special Investigative Committee, Chair, 1994-1995.

Statement: I consider it an honor to have been nominated to represent the US in the National Committee for the International Astronomical Union. I have been very active in the IAU for decades, but more than ever I feel that now is the time to seriously strengthen our international relations across the world, so we can better share our knowledge and future aspirations. Working together promises a more peaceful and productive future.

NOMINATING COMMITTEE (Vote for no more than TWO)

Candidates:
David S. De Young
Andrea K. Dupree
Steve B. Howell

Duties of Nominating Committee:

- Nominate candidates for the positions of Officers and Councilors of the AAS for election by membership. For positions of Treasurer, Secretary, and Education Officer, the decision is made in consultation with the Executive Committee of the AAS.

Current Nominating Committee Members:
*Blair D. Savage**
*Donna Weistrop**
C. Meg Urry
Hugh M. Van Horn
Margaret M. Hanson
** terms expire in 2003*

David S. De Young

Affiliation: National Optical Astronomy Observatory.

Position: Scientific Staff.

PhD: Cornell University, 1967.

Areas of scientific interest: Theoretical astrophysics, turbulence, fluid dynamics, nonlinear phenomena.

AAS positions and dates: AAS Nominating Committee, 1980-1982.

Other experience and positions relevant to service in the AAS: Associate Director, Kitt Peak National Observatory, 1982-1987; Associate Director, National Optical Astronomy Observatory, 1987-1993; Coordinating Chair, NOAO Telescope Allocation Committee, 1985-present; Chair, Executive & Steering Committees, San Diego Supercomputer Center, 1987-1991; President, Aspen Center for Physics, 2001-present; Project Scientist, US-NVO, 2001-present.

Statement: The Nominating Committee of the AAS carries out one of the most critical functions of the Society. This Committee provides the initial selection process that determines the future leadership of the Society and, as such, the Committee must be very aware of all the issues, short term and long term, which will affect the future of astronomy. In addition, the Committee must collectively have a broad knowledge of and familiarity with the AAS membership in order to select the most qualified candidates for office. If elected, I shall endeavor to make the best use of my past experience in astronomy and astrophysics to assist this committee in identifying the most talented future leaders of the AAS.

Andrea K. Dupree

Affiliation: Smithsonian Astrophysical Observatory, a part of the Harvard-Smithsonian Center for Astrophysics.

Position: Senior Astrophysicist.

PhD: Harvard University, 1968.

Areas of Scientific Interest: Stellar atmospheres, magnetic activity, winds, and mass loss; cluster stars; binaries; young stellar objects; high resolution spectroscopy.

AAS Positions and Dates: Russell Lecture Committee, 2001-2003; President, 1996-1998; Vice-President, 1986-1988; Committee on Astronomy and Public Policy, 1988-1991, Chair, 1989-1991; Nominating Committee, 1979-1982.

Other experiences and positions relevant to service in the AAS: Associate Director, Harvard-Smithsonian Center for Astrophysics and Head of the Solar and Stellar Physics Division, 1980-1987; Space Studies Board, 1982-1985, 1989-1992; Committee on Space Astronomy and Astrophysics, 1984-1987; Board on Physics & Astronomy, 1986-1989; Astronomy & Astrophysics Survey Committee, Panel on Education and Public Policy, Chair 1998-2000. I have also served on NASA and NSF Committees, AAAS elected offices, Canadian Long-Range Planning Board, Users' Advisory Groups, and Telescope Allocation Committees for space and ground-based observatories.

Statement: The AAS provides leadership, journals, meetings, workshops, and many other services to professional astronomers. The Nominating Committee and its activities bear critical responsibility for the success of the Society. Slates of candidates for your consideration must be chosen wisely to maintain an effective AAS. With other members of the Nominating Committee, I will work to identify candidates for office to ensure the diversity of viewpoints, experiences, and situations that represents astronomical activities today. Additionally those selected must be willing to 'work' for the Society, to participate and contribute ideas, energy, and time.

Astronomy is a thriving and exciting science. Because our community is relatively small, elected officers can make a big difference in the professional environment for astronomy. The Nominating Committee is where it all begins!

Steve B. Howell

Affiliation: University of California, Riverside.

Position: Research Professor, Department of Physics.

PhD: Universiteit van Amsterdam.

Areas of Scientific Interest: Interacting binaries, high precision photometry, infrared spectroscopy, searches for extra-solar planets.

AAS Positions and Dates: Member of AAS Working Group on Imaging Technology, 1985-present.

Other experiences and positions relevant to service in the AAS: Served on numerous NSF/NASA review panels; Member ASP, 1978-present; Kepler Science Team, 1999-present; chaired the EUVE Satellite Science Advisory Board, 1998-2001; Member IAU Commissions 9, 25, 27, 42.

Statement: The Nominating Committee performs an extremely important function in preparing the slate of candidates to present to the members for election as officers and to the council. As the AAS continues to attract bright, energetic younger people it also retains its core of well rounded exceptional scientists. The span of research and educational interests represented within the AAS today is extremely wide as evidenced by meeting attendance and the numerous member activities. And why not? It is a great time to be an astronomer. The facilities available to US for theoretical and observational work are fantastic and get better every day. Yet change is all around US. Change caused by less research funding for individuals, astronomy moving towards "large" project science, universities being run more like businesses and less like institutes of higher education, and closer to home, the AAS membership being more diverse than ever. I have been lucky to have been involved in many aspects of astronomy in my career, including industry, university, NASA, and observatory roles. I see myself as a diverse AAS member, probably more typical of the present membership than one might imagine. As a member of the Nominating Committee, I will make use of my experiences to present the society with a list of candidates for AAS offices who will serve them in a fair, balanced, and representative manner.

Candidate Statements continued on page 12

CALENDAR

Listed below are meetings or other events that have come to our attention (new or revised listings noted with an asterisk). Due to space limitations, we publish notice of meetings 1) occurring in North, South and Central America; 2) meetings of the IAU; and 3) meetings as requested by AAS Members. Meeting publication may only be assured by emailing lscholz@aas.org. Meetings that fall within 30 days of publication are not listed.

A comprehensive list of world-wide astronomy meetings is maintained by Liz Bryson, Librarian C-F-H Telescope in collaboration with the Canadian Astronomy Data Centre, Victoria, BC. The list may be accessed and meeting information entered at http://cadcwww.hia.nrc.ca/meetings.

AAS and AAS Division Meetings

201st Meeting of the AAS
5–9 January 2003 — Seattle, WA
Contact: AAS Executive Office (diana@aas.org)

High Energy Astrophysics Division (with AAS)
5–9 January 2003 — Seattle, WA
Contact: Roger Blandford (rdb@head-cfa.harvard.edu)

*High Energy Astrophysics Division
23–26 March 2003 — Mt. Tremblant, Quebec, Canada
Contact: Gale Quilter (gquilter@westover.com)
http://www.westoverconferences.com/HEAD

Division on Dynamical Astronomy
4–7 May 2003 — Ithaca, NY
Contact: Joe Burns (jab16@cornell.edu)

202nd Meeting of the AAS
25–29 May 2003 — Nashville, TN
Contact: Rich Gelderman (gelderman@wku.edu)and David Weintraub (david@ttau.phy.vanderbilt.edu)

Solar Physics Division
16–20 June 2003 — Laurel, MD
Contact: Ed DeLuca (vice-chair@spd.aas.org)

Division for Planetary Sciences
1–6 September 2003 — Monterrey, CA
Contact: Ted Roush (troush@mail.arc.nasa.gov)

Other Events

Stellar Populations and Gravitational Wave Observatories
2–5 December 2002 — University Park, PA
Contact: Lee Samuel Finn (StellarPop-Local@Gravity.PSU.edu)

SIRTF Observation Planning Workshop
6–7 December 2003 — Pasadena, CA
Contact: obsplan@ipac.caltech.edu
http://sirtf.caltech.edu/SSC/ost/WORKSHOP

American Geophysical Union 2002 Fall Meeting
6–10 December 2002 — San Francisco, CA
Contact: meetings@agu.org
http://www.agu.org/meetings/fm2top.html

IAU Coll. 190: "Magnetic Cataclysmic Variables"
8–13 December 2002 — Cape Town, South Africa
Contact: Sonja Vrielmann (sonja@pinguin.ast.uct.ac.za)
http://mensa.ast.uct.ac.za/mcv.html

Stellar Candles for the Extragalactic
9–11 December 2002 — ConcepciÄn, Chile
Contact: workshop@coma.cfm.udec.cl
http://cluster.cfm.udec.cl

XXIst Texas Symposium on Relativistic Astrophysics
9–13 December 2002 — Florence, Italy
Contact: texas_florence@arcetri.astro.it
http://www.arcetri.astro.it/~texaflor

Soft X-ray Excess Emission from Clusters of Galaxies and Related Phenomena
11–13 December 2002 —Huntsville, AL
Contact: Richard Lieu (hsv02@email.uah.edu)
http://www.uah.edu/news.ClusterGalaxies

*The Baryonic Universe
12–18 January 2003 — Aspen, CO
Contact: Rosemary Wyse (wyse@pha.jhu.edu)
http://andy.bu.edu/aspen

Neutrinos: Data Cosmos and Planck Scale
15 January–15 May 2003 — Santa Barbara, CA
Contact: David Gross (gross@itp.ucsb.edu)
http://www.itp.ucsb.edu

Carnegie Obs. Cent. Symp. III: "Clusters of Galaxies: Probes of Cosmological Structure & Galaxy Evolution"
26–31 January 2003 — Pasadena, CA
Contact: John Mulchaey (jmulchaey@ociw.edu)
http://www.ociw.edu/ociw/symposia/symposium3

IAU Coll. 191: The Environment and Evolution of Binary Stars
3–7 February 2003 — Merida, Yucatan, Mexico
Contact: C. D. Scarfe (scarfe@uvic.ca)
http://www.astroscu.unam.mx/~uaic191

Carnegie Obs. Cent. Symp. IV: Origin & Evolution of the Elements
16–21 February 2003 — Pasadena, CA
Contact: Andrew McWilliam (amcwilliam@ociw.edu)
http://www.ociw.edu/ociw/symposia/symposium4

*USNC/CODATA Workshop on Open Access and the Public Domain in Digital Data and Information for Science
10–12 March 2003 — Paris, France
http://www7.nationalacademies.org/usnc-codata

Initial ALFA Extragalactic HI Consortium Meeting
15–18 March 2003 — Arecibo, PR
Contact: Karen O'Neil (koneil@naic.edu)
http://alfa.naic.edu/extragal/meeting1

*34th Lunar and Planetary Science Conference
17–21 March 2003 — League City, TX
Contact: Paula Walley (walley@lpi.usra.edu)
http://www.lpi.usra.edu/meetings/lpsc2003

Cosmic Microwave Background and its Polarization
19–22 March 2003 — Minneapolis, MN
Contact: Catharine Grahm (cmb@physics.umn.edu)
http://www.tpi.umn.edu/cmb

The Davis Meeting on Cosmic Inflation
22–25 March 2003 — Davis, CA
Contact: Andreas Albrecht (albrecht@physics.ucdavis.edu)
http://inflation03.ucdavis.edu

2003 EGS–AGU–EUG Joint Assembly
7–11 April 2003 — Nice, France
Contact: meetings@agu.org
http://www.copernicus.org/egsagueng/index.html

33rd Saas-Fee Course: Gravitational Lensing: Strong, Weak & Micro
7–12 April 2003 — Les Diablerets, Switzerland
Contact: Georges Meylan (gmeylan@stsci.edu)
http://obswww.unige.ch/saas-fee

IAU Coll. 192: Supernovae (10 years of SN1993)
22–26 April 2003 — Valencia, Spain
Contact: J. M. Marciade (J.M.Marcaide@uv.es)

*MAPS 2002 Planetarium Conference
7–10 May 2003 — Lanham, MD
Contact: Patty Seaton (pxts13@yahoo.com)
http://www.maps-planetarium.org

Astrophysics of Dust
26–30 May 2003 — Estes Park, CO
Contact: Adolf N. Witt (awitt@dusty.astro.utoledo.edu)
http://astro1.panet.utoledo.edu/~aod03

*" Astronomy with Radioactivities IV" and " Filling the Sensitivity Gap in MeV Astronomy"
26–30 May 2003 —Seeon, Bavaria, Germany
Contact: Roland Diehl (rod@mpe.mpg.de)
http://www.mpe.mpg.de/gamma/science/lines/workshops/seeon03.htm

*10th Canadian Conf. on General Relativity and Relativistic Astrophysics
28–31 May 2003 — Guelph, Ontario, Canada
Contact: Eric Poisson (poisson@physics.uoguelph.ca)
http://www.physics.uoguelph.ca/poisson/ccgrra/

The Riddle of Cooling Flows in Galaxies and Clusters of Galaxies
31 May – 4 June 2003 — Charlottesville, VA
Contact: Thomas Reiprich (thomas@reiprich.net)
http://www.astro.virginia.edu/coolflow

*Future Directions in High Resolution Astronomy: A Celebration of the 10th Anniversary of the VLBA
8–12 June 2003 — Socorro, NM
Contact: Jonathan Romney (jromney@aoc.nrao.edu)
http://www.aoc.nrao.edu/events/VLBA10th/

*Sixth Biennial History of Astronomy Meeting
19–22 June 2003 — Notre Dame, IN
Contact: Matthew F. Dowd (mdowd1@nd.edu)
http://www.nd.edu/~hisast4/ndviinfo

SCOSTEP/IAU Symp.: Solar Variability as an Input to the Earth Environment
23–28 June 2003 — TatranskÄLomnica, Slovakia
Contact: ISCS 2003 (iscs2003@astro.sk)

Gordon Research Conference on the Origins of Solar Systems
6–11 July 2003 — Bristol, RI
Contact: Pat Cassen (pcassen@mail.arc.nasa.gov)
http://www.grc.uri.edu

IAU Coll. 193: Variable Stars in the Local Gr
6–11 July 2003 — Christchurch, New Zealand
Contact: Don W. Kurtz (dwkurtz@uclan.ac.uk)

*Michelson Inferometry Summer School
7–11 July 2003 — Pasadena, CA
Contact: Gerard van Belle (gerard@huey.jpl.nasa.gov)
http://sim.jpl.nasa.gov/michelson/iss.html

XXVth International Astronomical Union General Assembly
13–26 July 2003 — Sydney, Australia
Contact: IAU Secretariat (iau@iap.fr)
http://www.astronomy2003.com

IAU Symp. 216: Maps of the Cosmos
14–17 July 2003 — Sydney, Australia
Contact: L. Staveley-Smith (Lister.Staveley-Smith@csiro.au)
http://www.atnf.csiro.au/iau-ga/iau216

IAU Symp. 217: Recycling Intergalactic & Interstellar Matter
14–17 July 2003 — Sydney, Australia
Contact: P.-A. Duc (paduc@cea.fr)
http://www-dapnia.cea.fr/Sap/Conferences/IAU

IAU Symp. 218: Young Neutron Stars and Their Environment
14–17 July 2003 — Sydney, Australia
Contact: R. N. Manchester (iau218@csiro.au)
http://www.atnf.csiro.au/iau-ga/iau218

IAU Special Session 1: Recent Progress in Planetary Exploration
18–19 July 2003 — Sydney, Australia
Contact: D. P. Cruikshank (dcruikshank@mail.arc.nasa.gov)
http://www.atnf.csiro.au/iau-ga/iau218

IAU Special Session 2: Astronomy in Antarctica
18–19 July 2003 — Sydney, Australia
Contact: M. Burton (M.Burton@unsw.edu.au)
http://newt.phys.unsw.edu.au/sps2

IAU Symp. 219: Stars as Suns: Activity, Evolution and Planets
21–25 July 2003 — Sydney, Australia
Contact: A. O. Benz (benz@astro. phys.ethz.ch
http://cfa-www.harvard.edusymp219/home.html

IAU Symp. 220: Dark Matter in Galaxies
21–25 July 2003 — Sydney, Australia
Contact: M. Walker (m.walker@physics.usyd.edu.au)
http://cfa-www.harvard.edusymp219/home.html

IAU Symp. 221: Star Formation at High Angular Resolution
22–25 July 2003 — Sydney, Australia
Contact: M. Burton (iau221@phys.unsw.edu.au)
http://newt.phys.unsw.edu.au/iau221

IAU Spec. Sess. 3: New Classification Scheme for Double Stars
24 July 2003 — Sydney, Australia
Contact: B. D. Mason (bdm@draco.usno.navy.mil)
http://www.astronomy2003.com

IAU Spec. Sess. 4: Effective Teaching & Learning of Astronomy
24–25 July 2003 — Sydney, Australia
Contact: J. R. Percy (jpercy@utm.utoronto.ca)
http://www.astronomy2003.com

Asymmetric Planetary Nebulae III: Winds, Structure, and the Thunderbird
27 July–1 August 2003 — Mount Ranier, WA
Contact: Bruce Balick (balick@astro.washington.edu)
http://www.astro.washington.edu/balick/APN

*SPIE 48th Annual Meeting: International Symposium on Optical Science and Technology
3–8 August 2003 — San Diego, CA
Contact: spie@spie.org
http://www.spie.org

*Cometary Dust in Astrophysics
10–14 August 2003 — Crystal Mountain, WA
Contact: D. Brownlee (brownlee@bluemoon.astro.washington.edu)
http://stardust.wustl.edu/CDA.html

*International Workshop on Planetary Probe Atmospheric Entry and Descent Trajectory Analysis and Science
6–9 October 2003 — Lisbon, Portugal
Contact: David Atkinson (entryws@sstep.org)

IAU Coll. 194: Compact Binaries in the Galaxy and Beyond
17–22 November 2003 — La Paz, Mexico
Contact: Gagik Tovmassian (iau194@astrosen.unam.mx)
http://www.astrosen.unam.mx/~iau194

CANDIDATE STATEMENTS
Continued from page 9

FOR EDUCATION OFFICER

Candidate:

George D. Nelson

Duties of Education Officer:

- Responsible, under the direction of Council, for the coordination and oversight of all educational activities of the Society;
- Serves on the Council; and
- Chairs the Council-appointed committee which will advise the Council regarding the education programs of the Society

George D. Nelson

Affiliation: Western Washington University.

Position: Director, Science, Mathematics, and Technology Education.

PhD: University of Washington, 1978.

Areas of Scientific Interest: Science Education Reform, Preparation of Science Faculty and Teachers.

AAS Positions and Dates: Member, AEB, 2000-2003.

Other experiences and positions relevant to service in the AAS: Director, AAAS Project 2061, 1998-2001; Chair, HST External Independent Readiness Review Team, 1998-2002; Assistant/Associate Vice Provost for Research, University of Washington, 1989-1996; Associate Professor of Astronomy, University of Washington, 1989-1996.

Statement: Astronomy education at the AAS is focused on issues important to the professional astronomical community: recruitment and successful training of the next generation of astronomers that reflects the diversity of our population, improving the undergraduate preparation of future scientists and citizens, and the incorporation of our values as a research community into the reform of astronomy teaching. Modest amounts of credible education research and personal experiences of astronomers in classrooms highlight the problems we face.

Solutions are emerging from many sources and the AAS is well positioned to take advantage of these and to contribute new knowledge by fostering internal collaborations among the members and external collaborations with our colleagues in other disciplines. The reform of astronomy education is emerging as an important topic on campuses — in departments, in dean's and provost's offices, and on tenure and promotion committees — and the society has a role to gather and disseminate information and to host and sustain ongoing discussions of critical topics. I look forward to working with the Council, the Astronomy Education Board, the Director of Educational Activities, and the membership as the society continues to deepen its involvement in improving astronomy education and support for its members in their educational endeavors.

EDUCATION

ComPADRE Announcement

Susan Deustua, Director of Educational Activities,
deustua@aas.org

The American Association of Physics Teachers (AAPT), the American Astronomical Society (AAS), the American Institute of Physics/Society of Physics Students (AIP/SPS), and the American Physical Society (APS) are pleased to announce ComPADRE: Communities for Physics and Astronomy Digital Resources in Education, a project to create well organized, digital collections of high quality educational materials in physics and astronomy.

ComPADRE will consist of:

- Focused collections of materials, for specific courses, or serving specific constituencies, with connections to a wide range of online digital resources, including curricular materials, digital libraries, and online journals
- User communities that participate in the development and operation of these collections,
- An umbrella structure providing the technical infrastructure, to connect the specific collections, and work to establish new communities,
- A broad, underlying database of materials of many different types on which the collections will be built.

ComPADRE has received two years of funding from the NSF National Science Digital Library program in the Division of Undergraduate Education to establish its infrastructure and develop the first five collections. The AAPT will lead the project, with each organization involved in the development of one or more of these collections.

The partnership of the professional societies is vital for the success of ComPADRE because they are the links to the researchers, instructors, and learners that make up their ranks. The use of online resources is common for many physicists and astronomers. User groups will be formed to facilitate communication and provide feedback on the collections, taking advantage where possible, of existing committees and working groups within the societies. Editors for each collection will be chosen to help organize and select material. A panel of experts in physics and astronomy education and the use of the web and digital resources will provide advice on the development of the project. Technical support, web development, library services, and material review will be supported by the project. It is the direct participation of users that will make ComPADRE successful.

ComPADRE Vision and Goals

VISION: *To create a network of collections that provides learning resources and interactive learning environments that positively influence physics and astronomy students and their teachers in both individual and collaborative settings.*

ComPADRE will have a significant impact on the physics and astronomy communities, science education, and the national digital library efforts by doing the following:

1. BUILDING PROTOTYPE SITES THAT ENGAGE COMMUNITIES. Initial community sites include:
   - Resources for Introductory Astronomy courses,
   - Resources for Quantum physics courses,
   - Resources, materials, and mentoring activities for pre-service and in-service teachers of physics and physical science,
   - Resources for undergraduate students majoring in physics and astronomy, and
   - Informal science education for traditional students and the public.
2. BUILDING ACTIVE AND EFFECTIVE VIRTUAL COMMUNITIES that are engaged with the resources and providing the tools and services needed to build and support collections.
3. CAPITALIZING ON THE EXPERTISE IN PHYSICS AND ASTRONOMY to add value to resources, including metadata creation, reviews of materials, federation with existing collections, and the organization of materials for use by learners and instructors.
4. CREATING AND SUPPORTING THE DIGITAL LIBRARY INFRASTRUCTURE to:
   - Build the infrastructure for distribution within and across communities and disciplines,
   - Collect, review, and give access to materials, building on the associations' expertise,
   - Allow community members to interact over distances and asynchronously, and
   - Enhance learning by bringing quality resources to any classroom with Internet access.

Example Uses of ComPADRE Materials

An instructor is preparing a series of activities on the expansion history of the universe. She wants an historical introduction, data on the magnitude-redshift relation, and theoretical models showing how the cosmological parameters affect predictions. She wants students to create Hubble diagrams and participate in a laboratory activity. The result of a search of the ComPADRE Astronomy collection on "expansion history" is a list of annotated links sorted by category – graphs, images, activities, simulations, and web sites including a "suggested lecture."

A new high school teacher, preparing a unit on waves, goes to the ComPADRE Pre-College Physics Teacher Community Center to find material appropriate for his use. On a previous visit, the teacher provided background information about himself (name, teaching experience, self-rating of physics content knowledge) that is stored for future visits. By selecting the physics topic (waves), the teacher is provided with links to digital resources such as example lesson plans linked to related background references, online activities, labs, and assessment materials. The links are sorted according to the level of the course and the background of the teacher, with the most relevant material at the top.

For information about the Introductory Astronomy course site and how you can contribute please email Susana Deustua at deustua@aas.org. For more information about ComPADRE, email compadre@aapt.org.

NEWS FROM THE ASP

Michael Bennett, Executive Director, mbennett@astrosociety.org

ASP Signs Outreach Contract with JPL

Under a newly-signed contract with the Jet Propulsion Laboratory (JPL), the Astronomical Society of the Pacific (ASP) has begun working with amateur astronomers to develop a package of outreach materials which amateurs (and others) can use in a wide variety of outreach situations, from classrooms, to "indoor star parties," to service club presentations. The subject matter will concentrate on the basic science and technologies behind NASA's planet-finding missions.

In addition to creating the presentation materials and developing a training program, we will work with JPL's Navigator Education and Public Outreach staff to establish a community of enthusiastic amateurs to use the materials. Knowing how creative amateur astronomers can be, we expect they will soon be using the materials in ways we haven't even considered!

Teaching Astronomy With Science Fiction

A new annotated topical index to science fiction stories and novels that use good astronomy is now available on the education web pages of the ASP.

Compiled by Andrew Fraknoi, the listing currently has 195 entries organized into 40 categories, ranging from "anti-matter" to "Venus." It includes stories and novels by a number of scientists (some writing under a pseudonym) and by other writers who pay attention to the accuracy of their science. It is not designed as a complete index, but highlights stories that teachers have found particularly useful for making scientific ideas come alive for non-science students.

The site is at http://www.astrosociety.org/education/resources/scifi.html

The stories and novels listed deal with such topics as the dangers of asteroid impacts and exploding stars, the future exploration of Mars, the fate of travelers who venture close to a black hole, the search for intelligent life in the universe (and what forms it might take), and what it would be like to live among the rings and moons of the outer solar system.

New ASP Catalog and "AstroShop" Online , More Products, Improved Access

The newest ASP catalog contains over 70 new educational and astronomical products, including modest amateur telescopes, more teacher resources, books, and gift items. We have wonderful selection of over 40 slide sets, including several featuring the images from well-known astrophotographer David Malin, formerly of the Anglo-Australian Observatory.

Several new numbers of the *Conference Series* have been issued recently:

- **Number 272**: *The Future of Solar System Exploration, 2003-2013*, edited by Mark Sykes of Steward Observatory; and
- **Number 273**: *The Dynamics, Structure, and History of Galaxies*, edited by G. S. Da Costa and H. Jerjen of the Australian National University.

All the *Conference Series* volumes, and other educational products are now even easier to order, thanks to improvements in our AstroShop E-commerce site at http://www.astrosociety.org, and thanks to our new 24/7 phone access, 1-800-335-2624.

AAS GRANTS

Luck and Christlieb Awarded 2002 Chrétien Grants

The two Chrétien grant recipients for 2002 are **R. Earle Luck** (Case Western Reserve University) and **Sergei Andrevsky** (Odessa State University) for a proposal entitled "Using Cepheids to Determine the Galactic Abundance Gradient" and **Judy Cohen** (Caltech) and **Norbert Christlieb** (University of Hamburg, Germany) for a proposal entitled "The First Generation of Stars in the Galaxy."

The first recipient team (Luck and Andrevsky) plan to determine reliable abundance gradients in the Galactic disk from a significant number of Cepheids with high resolution and high signal-to-noise spectra. The emerging problem of radial abundance gradients in spiral galaxies in the field of galactic chemodynamics lies at the heart of the project and is a fundamental input to theories of galactic chemical evolution. The team has accumulated approximately 1000 spectra for 100 Cepheid variables over the past several years. A long-term visit by Andrevsky to Case Western will allow the team to analyze and interpret these spectra and derive the most reliable abundance gradients for 25 chemical elements from galactocentric radii of 4 kpc to 14 kpc, to resolve detailed spatial structure in the radial abundance distributions that could reflect the existence of different zones in the disk and finally, to investigate any Galactic disk morphological traits that can be traced with abundance gradients.

The second team (Christlieb and Cohen) plan to increase the number of known extremely metal-poor stars by a factor of at least three through the use of the Hamburg/ESO objective-prism survey. High resolution, high signal-to-noise spectra will be obtained for the newly identified stars using the Keck I Echelle spectrograph installed at Magellan 1 late in 2002. The new sample will allow the team to study the earliest phases of galactic chemical evolution with an unprecedented precision and studies of individual stars may even allow the derivation of an improved lower limit for the age of the Universe using nucleo-chronometric age dating. Newly developed analysis techniques (e.g. automatic spectral classification) will allow the completion of the project. Multiple visits by Christlieb to Caltech over the next three years are planned, allowing the intense collaborative effort necessary to see the project through to completion.

Norbert Christlieb of the University of Hamburg, Germany, and Judy Cohen of Caltech will search for extremely metal-poor stars using the Hamburg/ESO objective-prism survey.

The Chrétien grant was established in honor of the memory of Henri Chrétien, French Professor of Optics and co-originator of the Ritchey-Chrétien telescope design. The American Astronomical Society has been designated as the administrator of the grant program to further international collaborative projects in observational astronomy. Emphasis is on long-term visits and the development of close working relationships with astronomers in other countries.

R. Earle Luck of Case Western Reserve University, working with Sergei Andrevsky of Odessa State University, will attempt to determine reliable abundance gradients in the Galactic disk.

The AAS awards the Chrétien grant annually. Complete information on how to apply to the program is available online at http://www.aas.org/grants/chretien.html.

Save by Giving. . . to the AAS!

Now that December is here, people may be thinking about how to minimize their tax liability for 2002. If you find yourself in this situation, we hope that you will remember the AAS when it comes to end-of-the-year, tax-deductible donations.

Donations can be made at any time of year or with the payment of your annual AAS membership dues. There are two kinds of contribution you may elect: *restricted* or *unrestricted.*

If earmarked for a particular use, contributions would go into the Society's general account to be used at the discretion of the Council. This unrestricted contribution is the preferred option.

Alternatively, contributions are welcomed for one or more AAS programs described in the brochure accompanying your annual dues invoice.

For the longer view, a document has been prepared about how to include the Society your estate planning: http://www.aas.org/membership/plannedgiving.html.

We hope that if you are considering tax-deductible gifts, you will "**think AAS**." Please contact Bob Milkey, the AAS Executive Officer, if you have any questions.

HONORED ELSEWHERE
NOBEL LAUREATES
Continued from page 1

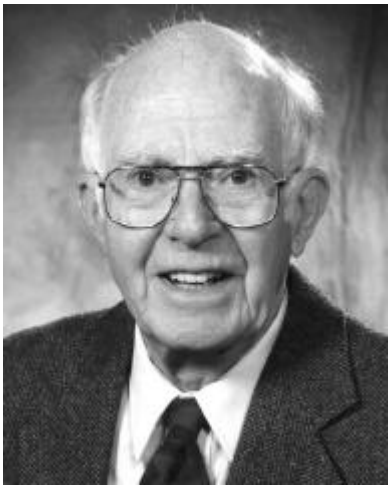
Riccardo Giacconi's early work in the 1960s led to the first detection of extra-solar X-rays. Giacconi and a team of scientists at American Science and Engineering, Inc., developed instruments for a satellite launched by the Department of Defense in 1970. The satellite, named UHURU, was the first satellite observatory dedicated to X-ray detection and it discovered hundreds of previously unknown sources of X-rays from neutron stars and black holes. Later, NASA took over this program that now manages the Chandra X-ray Observatory.

In 1981, Giacconi was appointed Professor of Astronomy in the Department of Physics and Astronomy at Johns Hopkins University and became the first director of the Space Telescope Science Institute, that manages the science program of the Hubble Space Telescope. In 1992, he became Director-General of the European Southern Observatory for the building of the Very Large Telescope (VLT) in Chile. He became president of AUI that operates the National Radio Astronomy Observatory in 1999.

Ray Davis, a chemist, was the first scientist to detect solar neutrinos that are indicative of nuclear fusion in the core of the sun. Starting in the 1960s, he built underground in a limestone mine his first solar neutrino detector — essentially a large vat of dry-cleaning fluid, perchloroethylene, a ready source of chlorine which converts to radioactive argon when bombarded with neutrinos. By also devising a method to extract and measure the argon created, he calculated the number of neutrinos entering. His finding only about one third of the expected number of neutrinos led to decades of world-wide searching for the reason.

Davis's findings were confirmed by subsequent experiments with giant detectors in Japan called Kamiokande, and later, Super Kamiokande, operated by a team of researchers led by Masatoshi Koshiba who shares the Nobel with Davis and Giacconi. Koshiba was able to determine that neutrinos can exist in several different states and that Davis had not detected neutrinos in all these states.

Riccardo Giacconi wins the 2002 Nobel Prize in physics for his discovery of X-ray sources outside our solar system.
Photo courtesy of the Space Telescope Sci. Inst.



For being the first to confirm the existence of solar neutrinos, Raymond Davis has been awarded the 2002 Nobel Prize in physics.
Photo courtesy of the Univ. of Pennsylvania

Charles Steidel, cosmologist at the California Institute of Technology, wins a 2002 MacArthur Fellowship.
Photo courtesy of the Calif. Inst. of Technology

Davis received a PhD in chemistry from Yale University in 1942, served in World War II and first worked for the Monsanto Chemical Company. He joined the Brookhaven Laboratory in 1948 and retired from there in 1984 to join the University of Pennsylvania team running the Homestake Neutrino Detector under the direction of Kenneth Lande, one of Davis's collaborators since the 1970s.

The Royal Swedish Academy of Sciences has published for the public a detailed discussion of the work of the three Laureates at http://www.nobel.se/physics/laureates/2002/public.html. The Nobel Lectures will be will be held Sunday, December 8 at the Aula Magna, Stockholm University.

Steidel is MacArthur Fellow

AAS Member **Charles Steidel**, Professor of Astronomy at the California Institute of Technology is among 24 MacArthur Fellows for 2002. He is cited for developing "a highly sensitive method to identify red-shifted object by detecting differential absorption of shorter wavelength light by interstellar hydrogen. ... [He] has provided astronomers the means to explore with much greater sensitivity the early processes in the cosmos that led to the distribution of galaxies in the contemporary universe."

Steidel received his PhD in 1990 from Caltech, was a Hubble Postdoctoral Fellow at UC Berkeley from 1990-1993, and taught at the Massachusetts Institute of Technology before joining the Department of Astronomy at Caltech in 1995. Among a number of honors, he won the AAS Helen B. Warner Prize in 1997.

MacArthur Fellowships have "no strings attached" and are intended to support people, not a particular project. Each fellowship comes with a stipend of $500,000 to the recipient, paid out over five years.

AGU Newly Elected Fellows

Forty-one distinguished scientists were elected in 2002 to be Fellows of the American Geophysical Union of which five are AAS Members. Congratulations to **Michael J. Drake**, University of Arizona; **Joseph V. Hollweg**, University of New Hampshire; **Judith L. Lean**, Naval Research Laboratory; **John W. Miles**, University of California, San Diego; and **Darrell F. Strobel**, Johns Hopkins University.

COMMITTEE NEWS

EMPLOYMENT

Andrea Schweitzer, Chair, schweitzer@frii.com

Steve Smith and his colleagues have completed an NSF-sponsored study of the skills that PhD scientists are using in their careers. This study provides useful insight about the training which graduate programs need to provide and I thought it would be of interest to Newsletter *readers.*

Smith is at the Joint Global Change Research Institute in College Park Maryland. A paper preprint and further details can be found at the project web site (http://spot.colorado.edu/~phdcarer).

Dr. Smith will be the featured speaker at the employment session at the summer 2003 AAS in Nashville, TN.

The Training and Work of PhD Physical Scientists

Steven J. Smith, Ethnography and Evaluation Research, Center to Advance Research and Teaching in the Social Sciences, CB 580, University of Colorado, Boulder, Colorado 80309-0580
ssmith@mailaps.org

Doctoral education has often been viewed as the pinnacle of the formal education system, the end point of an educational chain often described as a "pipeline." How useful is doctoral training in one's later career? In an NSF-funded project, we set out to perform an in-depth study of the training, careers, and work activities of PhD physical scientists. We first performed in-depth interviews, analysis of which were used to construct a survey questionnaire that was sent out to a sample of PhD holders 4-8 years after graduation. The general results of this project have been reported elsewhere (see note below, Smith et al., 2002), and a brief overview is given here.

We found that the use of the specialized disciplinary training varied quite widely, with about half of the physical scientists in our sample often using their training in specialized knowledge areas while the other half of our cohort often used only more general knowledge areas. We found no evidence, however, that use of specialized graduate training had an effect on job satisfaction. Job satisfaction, perhaps the most important indicator of the "success" of graduate education from an individual perspective, was instead most strongly correlated with the intellectual challenge of the job, irrespective of the job's use of the graduate's specialized training.

For many graduates, a large portion of their graduate education — their focus on mastering a narrow specialty field — is not often used in their later careers. The lack of use of specialty knowledge does not mean that graduate education is not useful, but instead of disciplinary knowledge, the most broadly used elements of a graduate education in the physical sciences are those that are only indirectly connected to disciplinary-based research activities. We found that most graduates often used a more general set of skills, including communication, research design, analysis, and management skills. Most graduates (88%) also use at least general knowledge of science or knowledge of their general field.

Our conclusion is that graduate training, at least as considered from the perspective of the work that PhD scientists perform, should not be understood solely as a means of producing disciplinary specialists. PhD scientists in the workplace can be more accurately described as workers who use a range of general analytical and communication skills, albeit with a substantial number who also use more specialized disciplinary knowledge.

Our work also compared evaluations of graduate education with use of specific skills in the workplace and, as with work from other authors, we found significant gaps. In particular, we found that the majority of PhD physical scientists work in an interdisciplinary environment, while most were not well prepared for such work by their graduate training.

(*Reference*: Steven J. Smith, Liane Pedersen-Gallegos, and Catherine Riegle-Crumb, "The Training, Careers and Work of Ph.D. Physical Scientists: Not Simply Academic" *AJP* 70(11) November 2002 (in press).)

STATUS OF MINORITIES IN ASTRONOMY

Keivan G. Stassun, Editor, SPECTRUM, keivan@astro.wisc.edu.

January 2003 *SPECTRUM* Newsletter

The January 2003 issue of CSMA's semi-annual newsletter, SPECTRUM, will be distributed by mail to subscribers and will be available at the CSMA's display table at the Seattle meeting.

Articles in the January 2003 will include:

- The top degree producers of minorities in the physical sciences;
- "Faculty Diversity: Too Little for Too Long;" and
- The status of African-American physicists in Department of Energy National Laboratories, by Keith Jackson, President of the National Society of Black Physicists

It's not too late to subscribe to *SPECTRUM*. Just fill out the simple subscription form on the CSMA's Website at: http://www.astro.wisc.edu/csma

Special Session at Seattle Meeting

The Committee on the Status of Minorities in Astronomy (CSMA) will host a Special Session at the Seattle AAS Meeting. The session will take place on Monday, 6 January, 2:00-3:30 pm. All AAS members in attendance are invited to participate.

This special session will highlight the important role of Minority Serving Institutions in preparing future minority astronomers. Minority Serving Institutions include Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs). Examples include Howard University (Washington, D.C.), University of Texas at El Paso, and White Earth Tribal and Community College (Mahnomen, MN).

These institutions represent large — and largely untapped — pools of minority talent in science and engineering. Roughly one-third of bachelor's degrees in science and engineering earned by African-Americans are earned at HBCUs; the top ten producers of Black bachelor's degree recipients in physics are all HBCUs. In addition, an often-overlooked source of minority talent in higher education is the nation's community (two-year) colleges, where roughly 50% of all minorities begin their post-secondary school careers.

This session will feature a panel of invited speakers from Minority Serving Institutions who will present viewpoints, strategies, and discussion on processes that encourage and mentor individuals who elect to pursue science-related careers including astronomy and astrophysics. The panel will also include representatives from the NSF REU (Research Experiences for Undergraduates) program.

Specific objectives for the Session include:

- Report to the AAS membership on the important role played by Minority Serving Institutions, where these institutions are, the populations they serve;
- Introduce the AAS membership to representatives from various Minority Serving Institutions, including an HBCU, an HSI, a TCU, and a community college;
- Provide an opportunity for representatives from these institutions to describe their role in preparing minority undergraduates in the sciences, how their programs bridge to PhD-granting programs in astronomy, and ways they suggest for the AAS to help enhance these bridges;
- Provide an opportunity for AAS members to dialogue with these representatives, hopefully resulting in specific "action items" that will serve to strengthen partnerships with Minority Serving Institutions.

To date, confirmed panel members include:

- **Kathleen McCloud**, Chair, Physics & Engineering, Xavier U.
- **James Falco**, Dean of Arts and Sciences, Heritage College
- **Robert Benjamin**, Director, REU Program, U. Wisconsin
- **Kathleen Eastwood**, Director, Education and Special Programs, NSF Astronomy Division

Seeking Recent Minority PhD Recipients

The CSMA would like to hear from recent astronomy PhD recipients who are members of under-represented groups. We want to highlight your research and outreach activities in the *SPECTRUM* newsletter. Please contact *SPECTRUM* editor, Keivan Stassun, at keivan@astro.wisc.edu.

STATUS OF WOMEN IN ASTRONOMY

Meg Urry, Chair, meg@yale.edu

January 2003 *STATUS* Newsletter

The January 2003 issue of *STATUS* will include the following articles.

- "Speeding up the Long Slow Path to Change" by Meg Urry
- "My Mother, the Scientist (Joan Feynman)," by Charles Hirshberg
- "'Show Me the Money'—Salary Equity in the Academy" by Donna R. Euben
- "Women Partners in Law Firms: Best Practices for Much-Needed Change" by Linda Dakin-Grimm
- "Mind Over Math - Why Math Ability Isn't the Problem for Women" by Diane Quinn
- "Women Scientists: Caroline Herschel and Mary Somerville."

Be sure to pick up an issue at the Seattle AAS meeting, or to become a subscriber, simply send your mail address to drenner@aas.org.

GENERAL

Positive Feedback on AAS Statement

As mentioned in the **WASHINGTON NEWS** column (see page 20), the AAS has received some good publicity recently for a position statement originally approved by the AAS Council in 2000 entitled "On the Teaching of the History of the Universe." It is posted on the Website and we reproduce it here in full:

On the Teaching of the History of the Universe

Adopted by AAS Council, 11 January 2000, Atlanta, GA

"The American Astronomical Society (AAS) is the largest organization of professional astronomers in the United States. Its 6,000 members are men and women of all convictions and a variety of religious faiths. They work in ALL fields of astronomy, including the study of planets, of stars and of the Universe as a whole. Research in each of these areas, and in many other areas of astronomy, has produced clear, compelling and widely accepted evidence that astronomical objects and systems evolve. That is, their properties change with time, often over very long time scales.

Specifically, the scientific evidence clearly indicates that the Universe is 10 to 15 billion years old, and began in a hot, dense state we call the Big Bang.

Given the ample evidence that change over time is a crucial property of planets, including our own, of stars, of galaxies and of the Universe as a whole, it is important for the nation's school children to learn about the great age of, and changes in, astronomical systems, as well as their present properties.

More generally we believe that it is important to teach students the nature of the scientific method. Scientific inquiry involves the development and testing of hypotheses based on a systematic collection and analysis of data acquired through observations, experiments, and computer simulations. Science is not a collection of facts but an ongoing process, with continual revisions and refinements of concepts necessary in order to arrive at the best current views of the Universe. Science is unified; it is not possible to make use of scientific laws in one context, and then deny them in another. The same laws of science that govern —or empower— our advanced technology also underlie changes in time of astronomical systems. Science is not based on faith, nor does it preclude faith. Whatever personal beliefs teachers, students, parents or administrators may hold, the teaching of important scientific concepts, such as the formation and aging of planets, stars, galaxies and the Universe, should not be altered or constrained in response to demands external to the scientific disciplines.

The astronomical discoveries of the past century, many made by American scientists, are among the great triumphs of the human intellect, and we deeply regret any attempt to ignore them or deny them.

Children whose education is denied the benefits of this expansion of our understanding of the world around US are being deprived of part of their intellectual heritage. They may also be at a competitive disadvantage in a world where scientific and technological literacy is becoming more and more important economically and culturally."

INTERNATIONAL NEWS

Sydney & the IAU: Opportunity You Can't Ignore

Harry Hyland & John Whiteoak, Co-Chairs of the National Organizing Committee, 25th IAU General Assembly

We hope that by now many of you are planning to come to Beautiful Sydney next July and help US make the 25th IAU General Assembly the biggest and the best yet. We are preparing for you a very extensive and exciting scientific program containing six Symposia, 21 Joint Discussions, and several special sessions. And if you choose to sneak away from the many Commission and Division 'Business' meetings (and we hope you won't of course), there will be many offered tours to whet your appetite and 'make your day.' This program will be complemented by additional events such as public talks, a public exhibition, and other associated public events that are now being organized.

Please visit our General Assembly Website, http://www.astronomy2003.com. You can do more than merely learn about the event. You can now register for the Assembly, book accommodation and submit presentation abstracts using on-line forms, and can also download forms to apply for IAU Travel Grants and book various tours. Note that if you register before 30th April, you will be included in a draw for a Sydney Harbor Bridge climb for two people—this beats jogging around the local park for exercise any day! You should be aware that unless you are an Australian or New Zealand citizen, you will need a visa to enter Australia, and you should start organizing this well in advance of your travel date.

IAU's *Information Bulletin 91* has been available since September and this contains a section on the General Assembly, together with registration, accommodation and travel grant forms. Updated information will be included in *Information Bulletin 92*, due out at the beginning of 2003.

We believe that your trip to Australia and the General Assembly will be an unforgettable experience!

Save Costs By Renewing Promptly

The 2003 AAS Membership renewal invoices were mailed in October. Please renew promptly on the first invoice to save us the cost of mailing you another invoice.

To add subscriptions, change journal mailing options, or join Divisions, refer to the 2003 Membership Renewal Brochure which accompanied the invoice.

ANNOUNCEMENTS

Keck Telescopes Open for Competitive Access

A new NSF program will allow US astronomers competitive access to the twin 10-meter Keck telescopes starting early next year. The new NSF program is called the Telescope System Instrumentation Program (TSIP) and will be administered by the National Optical Astronomy Observatory.

The goals of TSIP are to strengthen the ground-based O/IR system of capabilities and provide incentives for public and private facilities to coordinate development. The program accomplishes this by offering funding from the NSF to develop cutting-edge astronomical instrumentation for large ground-based telescopes. In return, successful proposers must provide a proportional amount of observing time on the telescope, which is then made available to the entire US community.

In the first two awards under the TSIP program, the privately operated W. M. Keck Observatory will receive $2.75 million to support the fabrication of an integral field spectrograph for the Keck II telescope called OSIRIS, and $1.14 million for preliminary design of an advanced near-infrared imager and multi-object spectrograph for Keck II named KIRMOS.

The TSIP formula requires telescope-observing time equal in value to one-half the instrumentation funding. Therefore, Keck will provide 41 total nights on one of the two Keck telescopes. The first 12 nights will be awarded during the next regular NOAO time allocation process, which provides observing time for the 2003A semester.

TSIP was the highest-priority moderate initiative of the McKee-Taylor Decadal Survey. The program will continue with $4 million in funding in FY2003. The solicitation for new proposals has just been released via TSIP's web site (see http://www.noao.edu/system/tsip/). For more information, contact NOAO Deputy Director Todd Boroson, tyb@noao.edu.

NSO Call for Observing Proposals

The current deadline for submitting observing proposals to the National Solar Observatory is **15 February 2003** for the second quarter of 2003. Forms and information are available from the NSO Telescope Allocation Committee at PO Box 62, Sunspot, NM 88349 for Sacramento Peak facilities (sp@nso.edu) or PO Box 26732, Tucson, AZ 85726 for Kitt Peak facilities (nso@noao.edu). A TeX or PostScript template and instruction sheet can be emailed at your request; obtained by anonymous ftp from ftp.nso.edu (cd observing_templates) or ftp.noao.edu (cd nso/nsoforms); or downloaded from the WWW at http://www.nso.edu. A Windows-based observing-request form is also available at the WWW site. Users' Manuals are available at http://www.nso.edu/sunspot/telescopes.html for the SP facilities and http://www.nso.noao.edu/nsokp/nsokp.html for the KP facilities. Proposers to SP may inquire whether the Adaptive Optics system may be available for their use. Observing time at National Observatories is provided as support to the astronomical community by the National Science Foundation.

Call for NRAO Observing Proposals

Astronomers are invited to submit proposals for observing time on the NRAO Green Bank Telescope (GBT), Very Large Array (VLA), and Very Long Baseline Array (VLBA):

Instrument	Deadline	Observing Period	Note
GBT	2003 Feb 3	2003 Jun–2003 Sep	
	2003 Jun 2	2003 Sep–2004 Jan	
VLA	2003 Feb 3	2003 Jun–2003 Sep	+
	2003 Jun 2	2003 Sep–2004 Jan	*
VLBA	2003 Feb 3	2003 Jun–2003 Sep	
	2003 Jun 2	2003 Sep–2004 Jan	

Notes:

(+) A configuration with a maximum baseline of 36 km. The VLBA antenna at Pie Town, New Mexico, may also be requested, which doubles the maximum baseline.

(*) B configuration with a maximum baseline of 11 km.

The NRAO has inaugurated a new program to support GBT research by students, both graduate and undergraduate, at U.S. universities. The program covers student stipends, computer hardware purchases, and student travel to meetings to present GBT results. Applications to the program are tied to GBT observing proposals.

The NRAO and the European VLBI Network jointly handle proposals for observing time on the Global VLBI Network. The deadline is 2003 Feb 3 for the session in 2003 May/Jun.

Further information on NRAO instruments and proposal submission routes is available from the NRAO home page at http://www.nrao.edu.

OSS/EPO Newsletter Online

The latest issue of *Voyages*, the NASA Office of Space Science Newsletter on Education and Public Outreach is now online at http://spacescience.nasa.gov/education/news/index.htm.

Voyages is published three times each year and highlights programs, events and products supported by the NASA Office of Space Science, as well as the many and diverse contributions made by the space science community in support of education as a core mission of NASA.

New CORONAS Project Site Opened

The Russian-Ukrainian satellite CORONAS-F launched on 31 July 2001 continues observations of the Sun. Information on the CORONAS-F data access is available on the new CORONAS project Web site http://coronas.izmiran.rssi.ru.

IAU: Astronomy Education and Development

Jay M. Pasachoff, US National Liaison to IAU Commission 46, jay.m.pasachoff@williams.edu

The Fall 2002 Newsletter is available on line at http://physics.open.ac.uk/IAU46. It contains not only a summary by Bruce Partridge, AAS Education Officer, of the AAS "Astronomy 101" meetings and the goals agreed upon, but also a set of reports of astronomy education in various countries from the National Liaisons. IAU Commission 46 is the only IAU Commission with representatives from every member country.

Hubble Space Telescope Cycle 12 Call for Proposals

Release Date: **16 October 2002**

Proposal Deadline: **24 January 2003**

NASA and The Space Telescope Science Institute (STScI) are pleased to announce the Cycle 12 Call for Proposals for Hubble Space Telescope (HST) Observations and funding for Archival Research and Theoretical Research programs. Participation in this program is open to all categories of organizations, both domestic and foreign, including educational institutions, profit and nonprofit organizations, NASA Centers, and other Government agencies. This solicitation will be open from 16 October 2002 through 24 January 2003, 8:00pm EST, and *proposals may be submitted throughout this period*. Results of the selection will be announced in April 2003.

All programmatic and technical information, as well as specific guidelines for proposal preparation, are available electronically at http://www.stsci.edu/spd/cycle12/announce.html.

Questions can be addressed to the STScI Help Desk (help@stsci.edu; Tel: 410-338-1082).

Solar and Space Physics Survey Findings Online

The pre-publication version of "The Sun to the Earth-and Beyond," the report of the Solar and Space Physics Survey Committee, is now available in PDF format on the web at http://www.nationalacademies.org/ssb/sspsuntoearth.html.

The report, which represents the culmination of an 18-month effort by the Survey Committee and five study panels, was accepted by the National Research Council in late July. It is currently undergoing final editorial revision. Publication is planned for early December, so that the final report will be available in time for the fall meeting of the American Geophysical Union.

The complete list of the Committee's recommended research priorities, along with brief descriptions of each initiative, can be found in Table ES-1 of the executive summary of the report.

ASP Annual Awards

Nominating deadlines for the Astronomical Society of the Pacific awards are:

- *Trumpler*: Chairs of astronomy and physics departments in North America may nominate by **15 January 2003**
- *Klumpke-Roberts*: **31 December 2002**
- *Muhlmann*: **15 December 2002**
- *Brennan*: **15 December 2002**
- *Amateur Achievement*: **15 December 2002**
- *Las Cumbres Amateur Outreach*: **15 December 2002**

See http://www.astrosociety.org/membership/awards/awards.html for nomination and other award details.

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ELECTION ISSUE

WASHINGTON NEWS

Kevin B. Marvel, Deputy Executive Officer, marvel@aas.org

By the time you read this column, it is likely that the appropriations bills for FY2003 will have worked their way through the legislative process and the funding levels for NASA, NSF and DOE will be established. (Details on the outcome of the appropriations process may always be found on the AAS Public Policy web pages). The appropriations process was much delayed this year due to the focus on the Iraq issue and the intensified focus of Congress on issues of national security policy such as the new Department for Homeland Security.

Currently, rumors abound that once the November elections take place the money floodgates will spring open, spewing large appropriations across all the federal agencies. Since the sitting members of Congress finishing the appropriations process will be a lame duck session, those members who have lost their local elections have little incentive to maintain fiscal responsibility, perhaps helping to improve their chances should they run for Congress again in two years. Whether a flood of money really materializes or not is anybody's guess, but even if it does occur, it is not likely to significantly change the funding for astronomy research. Astronomy represents a very small fraction of the federal budget, despite its wide popularity with the public. Whatever happens, AAS members should take a few minutes to thank their legislators by writing a letter of appreciation for their support of astronomy research. The impact of these short thank-you letters is truly amazing and builds good-will with legislators, even if science funding is not their primary focus.

The AAS has received some good publicity recently for a position statement originally approved by the AAS Council in 2000 entitled "On the Teaching of the History of the Universe" (full text, page 17).

The National Center for Science Education recently sent an alert to its mailing list (sign up for the email list at this Website: http://www.ncseweb.org) describing the AAS statement and adding the Society to the list of organizations with statements on the important issue of teaching creationism in public schools.

AAS position statements (formally called AAS Council Resolutions) are formed when issues of importance are brought to the AAS Council for consideration. Usually originating from AAS Committee discussions on topical issues, they are considered by the AAS Council at each AAS meeting as well as by the AAS Executive Committee at times between AAS meetings.

The AAS Executive Committee is designated to act on behalf of the whole council on many issues but always refers issues of great importance or controversy to the full Council for proper debate and consideration.

If AAS members have an issue that they feel is of enough importance for the Society to form a position statement, they are welcome to submit the issue (with appropriate background information) to an AAS Committee or to a member of the AAS Council or Executive Committee. The issue can then be discussed by either the Committee with jurisdiction or by the full Council as appropriate. For Council resolutions see http://www.aas.org/governance/council/resolutions.