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AAS NEWSLETTER

A Publication for the members of the American Astronomical Society

AAS EXECUTIVE OFFICER BOB MILKEY TO RETIRE IN 2006

Bob Milkey, who has ably served as AAS Executive Officer for nearly 11 years, has announced his intention to retire at the end of June 2006. After a long orbit through Baltimore, where he worked at the Space Telescope Science Institute, and his service to the AAS in Washington, Milkey is eager to return to Tucson, where he served on the scientific staff of the Solar Division of the Kitt Peak National Observatory.

AAS President Bob Kirshner praised Milkey's contribution: "Until I became President, I had only a vague idea of what the Executive Officer did. Now I know that having someone like Bob Milkey, who understands what the Society is about and who has the skill and good sense to help us do those things every day, is essential to make the AAS operate successfully. He's been an excellent Executive Officer and we will need to work hard to make sure we find a worthy successor."

Kirshner is taking the lead to form a search committee to help define the job and to find the next Executive Officer. Full details of the search will be announced through the AAS electronic announcements and the *AAS Job Register*. The goal is to find a successor by January 2006 to provide adequate time for the new person to benefit from Bob's knowledge before he departs. The Executive Officer is responsible for smooth functioning of the full range of activities of the AAS in accord with the policies and guidance provided by the AAS Council.

PUBLICATION NEWS

***Astrophysical Journal* Editor in Chief to step down**

Professor Robert C. Kennicutt, Jr., University of Arizona and Editor-in-Chief of the *Astrophysical Journal* has announced that he will relinquish his position as Editor-in-Chief effective with the completion of his current term at the end of 2006. He has served as the Editor-in-Chief since 1999 when he was chosen as Editor to succeed Helmut Abt. As a result of his impending departure, the American Astronomical Society is soliciting applications and nominations of candidates to assume the position of Editor-in-Chief of the *Astrophysical Journal* at the end of 2006. The Search Committee has been formed and a longer advertisement, statement of desired qualifications, and list of application materials will be placed in the *AAS Job Register*, and sent via email. Professor Patrick S. Osmer, Chair of the Department of Astronomy at Ohio State University and a member of the AAS Publications Board will Chair the Search Committee. The Committee welcomes applications or nominations, and both should be sent to the *ApJ* Search Committee, American Astronomical Society, 2000 Florida Ave, NW, Suite 400, Washington DC 20009-1231 or by e-mail to apj-search@aas.org.

New *AJ* Editorial Office Opens

On 1 January, Jay Gallagher began his term as Editor of *The Astronomical Journal (AJ)*, and the *AJ* editorial office moved to the University of Wisconsin at Madison. Authors are encouraged to submit articles using the new Web-based Peer Review service on the *AJ* website. Authors can also continue to submit manuscripts electronically via FTP. Complete instructions are available on the *AJ* website at www.journals.uchicago.edu/AJ. Questions should be directed to Anita Makuluni, Managing Editor (aj@astro.wisc.edu).

Linking Initiatives

The AAS journals have introduced three new linking and tagging options for the electronic editions this year, in collaboration with ADS, CDS, and NED.

1. New AASTeX 5.2 markup will now allow authors to insert links in the electronic text to data sets at participating data centers, via ADS. The September 2004 *Spitzer Space Telescope* special issue of *ApJS* is the first issue to demonstrate this new capability.



AAS Executive Office Staff

Robert W. Milkey, Executive Officer
Kevin B. Marvel, Deputy Executive Officer
Kelli Gilmore, Meetings Manager
Susana E. Deustua, Director, Educational Activities
Zuzana Kelyman, Registration Coordinator
Judith M. Johnson, Publications Manager
Shantice Jones, Membership Services Specialist
Debbie L. Kovalsky, Information Systems Manager
Natalie F. Patterson, Financial Assistant
Dennis W. Renner, Manager, Membership Services
Crystal M. Tinch, Publications Specialist

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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 **AAS Newsletter** should be sent to crystal@aaas.org. Appropriate pictures are welcomed. For further information about deadlines and submitting articles, see www.aas.org/publications/newsletter.html. Items submitted to the **AAS Newsletter** are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to ela@aaas.org.

Judith M. Johnson, AAS Publications Manager
Robert W. Milkey, Editor
Crystal M. Tinch, Associate Editor
Jeff Linsky, U. Colorado, Associate Editor, Letters

Note: Letters to the Editor on current issues of importance to astronomers are welcomed. Letters must be signed and should not exceed 250 words. Send to Jeff Linsky, Associate Editor, Letters, (jlinsky@jila.colorado.edu; 303-492-7838 phone; or 303-492-5235 fax) one week prior to the **AAS Newsletter** deadline. Letters may be edited for clarity/length (authors will be consulted) and will be published at the discretion of the Editors.

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 submission.

AASTeX Homepage:

www.journals.uchicago.edu/AAS/AASTeX

User Support: aastex-help@aaas.org

Journal Homepages/Manuscript

Submission: *AJ*, *ApJ*, *ApJL*

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

PUBLICATION NEWS CONTINUED

2. Another new feature allows authors to generate a list of object links to SIMBAD and/or NED, which will appear in the content frame of the article. A linked object list in the frame of the electronic article will then dynamically update to ADS, NED, and SIMBAD objects web pages as soon as they become available, and will check for new links each time the article is accessed.

3. The third initiative is the inclusion of a new Facilities acknowledgement field, which will allow authors to identify instruments used in their papers in a consistent fashion across papers, and so help organizations track the effectiveness of their telescopes. Facilities should be listed using a set of standardized acronyms from a controlled vocabulary list administered by the AAS; these lists will be separately tagged in the SGML archive to facilitate searching.

Whether to use the new features described above is up to the individual author, but we encourage it, because they are designed to benefit many different portions of the astronomical community. Data set and object links will allow readers more seamless navigation between the AAS journals and the data centers, and will allow data centers to get important information into their archives more quickly and efficiently. In addition, with this information the data centers can more rapidly construct links from their archives back to the electronic journals to help keep researchers aware of new literature on their favorite objects and data sets. The increase in the interconnectivity between journals and data centers means that a modest amount of effort will be rewarded with much greater visibility for your paper.

If you have any questions regarding the linking initiatives, please contact Greg Schwarz (gschwarz@as.arizona.edu).

New Treatment for Large Figure Sets

The AAS journals and the University of Chicago Press have developed a new presentation format for large numbers of related figures (~25 or more), or “figure sets,” for the electronic editions. These allow the figures to be aggregated into subsets, each with its own navigation and thumbnail gallery. It is anticipated that authors making use of this format will also choose to run only one or a few figures of the set in print, the rest appearing online only, although this is not required. Further details can be found at the *ApJ* and *AJ* websites.

Astrophysical Journal Associate Editors

We are pleased to announce the appointment of Ethan Vishniac as an Associate Editor-in-Chief of *The Astrophysical Journal (ApJ)*. He joins the other Associate Editor-in-Chief, Jim Liebert, and both individuals will assist the Editor-in-Chief in organizing the peer review functions of the *ApJ* and advising on editorial policy matters.

MEMBER DEATHS

Since the 2004 December **AAS Newsletter**, the Society is saddened to learn of the deaths of the following members, former members and affiliate members:

David Evans
Helen D. Prince

Lyman F. Kells
Damon P. Simonelli

Timothy McCullough

LETTERS TO THE EDITOR

Redefinition of Coordinated Universal Time

Dear Editor:

Two recent letters opposed a proposal that the International Telecommunication Union eliminate leap seconds from Coordinated Universal Time (UTC). We wish to respond in support of the proposal. (Details are given in *Metrologia* 38, 509 - 529, 2001.)

UTC, the time scale for civil use, is based on the second of the International System of Units (SI). When adopted in 1972, UTC was a compromise that allowed broadcast radio signals to disseminate both a realization of the SI second and an approximation to UT1, an angle measuring the Earth's orientation in space, for celestial navigation. The difference UT1 - UTC is maintained within 0.9 second by introducing one-second steps (leap seconds). Today the Global Positioning System (GPS) provides position and time world-wide with far greater precision. Also, leap seconds have become increasingly difficult to implement in sophisticated timekeeping networks, causing confusion and the adoption of alternative time scales without steps. The problem will become worse when multiple leap seconds per year will be required because of tidal friction and decade fluctuations.

As UT1 is an angle, it does not represent time as commonly defined today. The notion that time should be strictly related to the Sun's position was discarded in the nineteenth century when mean solar time replaced apparent solar time in astronomical ephemerides.

The International Earth rotation and Reference system Service (IERS) produces weekly bulletins in printed and electronic formats updated daily with observed and predicted values of UT1 - UTC. These data are several orders of magnitude more accurate than the coarse approximation of UT1 by UTC. The solution to astronomers' needs is not continuing leap seconds, but rather taking advantage of available precise Earth orientation information.

We recommend that AAS members support a redefinition of UTC without discontinuities and consider using IERS data to obtain UT1.

Dennis D. McCarthy, Henry F. Fliegel, Robert A. Nelson
mccarthy.dennis@usno.navy.mil

A Procedure for Accessing Information in AAS Meeting Abstracts

Dear Editor:

Before I attend the AAS meetings held in January or June, I typically flip through the booklet distributed prior to the meeting and make a list of presentations that I don't want to miss. Because the AAS abstracts are available online and apparently are cataloged by search engines prior to the meeting itself, it also can be helpful to search them electronically prior to, or during, the meeting in order to produce a custom listing. For example, try a Google search like this one:

transit OR transiting "AAS 205th Meeting" site:www.aas.org

The syntax above restricts the search to web pages stored on www.aas.org and containing the phrase "AAS 205th Meeting" and either the word "transit" or "transiting." One could replace "transit OR transiting" with "teach OR teaching OR teacher" to find presentations that contain one or more of those three words. Presumably other search engines or ADS could be used.

I encourage the AAS to make this procedure known to the membership in the information booklet mailed out before the meeting and in electronic communications concerning the meeting. In these mailings the AAS should give an approximate date when the abstracts will be available for electronic searches through the AAS web site.

Peter R. McCullough
pmcc at stsci edu

[Editors Note: Members are notified by email as soon as the abstracts are posted. Future Final Program announcements will contain information on searching the abstracts. If you are not receiving AAS email, please verify your email address in the Public Directory, <http://members.aas.org/directory/directory.cfm>. Send any corrections to address@aas.org.]

PRESIDENT'S COLUMN

Robert Kirshner, aaspres@aas.org

2005 is Einstein's Big Year. As a provisional patent inspector (second class), Albert Einstein had a really good year in 1905, using Brownian motion to make atoms more real, explaining the photoelectric effect by light quanta, and considering the "electrodynamics of moving bodies" to create the startlingly original special relativity that continues to strain, crack, and (in good cases) reform the common sense of our students.

As part of the centennial fun, I was invited to give a talk in the Einstein Colloquium series at the Weizmann Institute in Israel. Einstein was offered the Presidency of Israel when it was founded. To everyone's relief he declined. I'd never been there, and I'm already a President, so I agreed. To give the talk, I mean.

When I arrived from Boston, jet lagged into the next day, I was desperately trying to stay awake until it was time to go to sleep. I started reading the stuff in the Weizmann guest house: descriptions of the Institute, last year's annual report, including good work by the astrophysicists. But, to be honest, even models for neutrinos from gamma-ray bursts were not sufficient antidote to creeping lethargy. In my reduced mental state, the souvenir catalog from their gift shop was more stimulating: I could get pens, clocks, backpacks, and yo-yo's with the Weizmann logo. And I could get "SmarT-shirts" with funny scientific sayings on the back from Einstein (something about dice), Will Rogers (a pun about being on the right track until the train came), Jacob Bronowsky (elegant expressions of skepticism in science), hackneyed quotes from the ►

widely cited “anonymous,” and a shirt with a witty saying by Robert P. Kirshner. In my glazed state, I thought, “What a coincidence! It’s not that common a name.” The shirt said, “Although the Universe is under no obligation to make sense, students in the pursuit of the Ph.D. are.” The next day, I bought 20 of them to give to all my ex-students, though I still can’t remember exactly where I wrote that. Then again, Einstein never wrote that the cosmological constant was his greatest blunder, and that’s getting to be one his top quotes.

I gave the talk at Weizmann, and then at the Hebrew University in Jerusalem, the beneficiary of Einstein’s estate. Buy an Einstein action figure, help a university. Then I went to Tel Aviv and to the Technion in Haifa. All of this got me thinking a bit about why a small country (~2% of the population of the US) with lots of earthly problems (see your daily newspaper) would have such a lively scene in astronomy. The usual arguments for funding science—that technology stimulates the economy, that science is essential for national defense, and that science is leading to breakthroughs in medicine are all real. Nobody is opposed to being prosperous and safe and healthy. But the reasons for doing science, and especially for fostering astronomy in a small country like Israel, or in a big wealthy one like the US, go beyond these practical aims. As we all know, we’re doing our science out of curiosity. We want to know how the universe works and how it got to be the way it is. And we know there is a wider public that cares about these ideas. One of our goals is to make that slice of society wider. Astronomy is often the hook that got scientists, now working in other fields, drawn into science as a kid. For countries that depend on people as their greatest resource, that’s a very valuable role. But our chief mission in life can’t be only to bait-and-switch kids into becoming computer programmers!

The ideas of astronomy, even though they do not have much to do with daily life, do matter to people. In a perverse way, I think that’s the source of the steady stream of nut mail I get, especially the letters objecting to Einstein’s ideas as violating common sense. People care. Their letters describing novel cosmologies usually begin with, “It seems to me that....” But, alas, the universe is under no obligation to make sense. I read that on a T-shirt. If it has dark energy, that’s not a matter of personal preference.

More positively, the public support for the Hubble Space Telescope and the Mars rovers shows that there is a wide slice of society that is interested in the world around us. We need to help them understand that there is exploration underway everywhere in science: laboratories and computers and observatories on Earth are vehicles for exploring the Universe as much as HST or a rover on the surface of Mars. We know all this, but it bears repeating. If the rumors about the President’s Budget are true, Einstein’s centennial year will be another season where we need to make the case for astronomy, and for science generally, as clearly and as truthfully as we can. The reason for supporting science includes spin-offs and economic growth, but there are deeper reasons, too. People want to know what the world is and how it works. After all, somebody is buying those T-shirts.

MINNEAPOLIS MEETING



Twin Cities here we come! After nearly a dozen years, the AAS spring meeting returns to Minneapolis, MN. Please join us as we study the dual Minne-AAS effect (or AASapolis?). Executive Officers are certainly affected and Astronomy funding may be. Peter Boyce retired a year after our last Minneapolis meeting and Bob Milkey will retire a year from now. Prior to the last Minne-AAS AXAF and Cassini were in danger of cancellation. After Minne-AAS impact, not only were AXAF and Cassini saved but Astronomy was

funded at a higher level than requested. Let’s meet and repeat the prolific cycle.

Many exciting sessions are planned. Invited Speakers include: Liliya Williams, Chick Woodard, Andrew Franknoi, and Spiro Antiochos (2005 Hale Prize Lecture). The 2004 Warner Prize Lecture, delayed because William Holzappel was in the South Pole, will also be given in Minneapolis.

The Topical Sessions are being organized by: Jim Truran, *Asymmetries in Type Ia Supernovae*; Robert Gehrz, *The Formation and Fate of Stardust*; George Ricker, *X-Ray Flashes*; Philip Kaaret, *Relativistic Jets*; and Steve Federman, *Highlights in Laboratory Astrophysics*.

The Special Sessions are: Patricia Knezek, *Institutional Solutions to the “Two-Body Problems”*; Tod Strohmayer, *Fundamental Physics with Millisecond Pulsars*; Andrea Schweitzer, *NASA Strategic Planning and the Future of Space Astronomy*; Kevin Marvel, *Professional Ethics for Astronomers*; Susana Deustua, *Cool Astronomy for Everyone*; Susana Deustua, *A follow up to the workshop for New Faculty*; and Susana Deustua, *Demystifying EPO and the Broader Impacts Criteria*.

The meeting will be held at the Minneapolis Convention Center, 29 May – 2 June 2005. (Yes, this is Memorial Day weekend. The contract was signed years ago, prior to member requests that we avoid holidays.) Hilton is the headquarters hotel. It is attached to the Convention Center. The local organizing committee has been working hard preparing for the meeting, and promises a wonderful experience for all meeting attendees. Full meeting details are available online at www.aas.org.

Do not miss the Second American Astronomical Society Invitational Hockey Game Sunday, 29 May, from 9:30pm - 11:00pm, after the opening reception! The game will be non-check, full slap shot and co-recreational. There will be officials and a scorekeeper. Individuals planning to play should contact Bob Gehrz (gehrz@astro.umn.edu; 612-624-7806), or Chick Woodward (chelsea@astro.umn.edu; 612-624-0254). We especially need to find goalies.

SECRETARY'S CORNER

John Graham, aassec@aes.org

Committee Vacancies Need to be Filled

Vacancies for several AAS committees will be filled by Council at its meeting in Minneapolis the last week in May 2005. Current committee members are listed under Council/Committees on the AAS homepage, www.aas.org. Committees which have vacancies are:

Committee on Employment
Investment Advisory Committee
Light Pollution, Radio Interference and Space Debris
Committee on Status of Minorities
Committee on Status of Women in Astronomy
Committee on Childcare at Meetings

AAS Members may themselves volunteer, or suggest other Members for one of the vacancies. To assist members of the Committee on Appointments who may not know everyone, please include the date of PhD, as well as a few sentences conveying the background and area of expertise of the named individual. Our goal is to have both quality and breadth across the AAS committee structure. Please let us know if you think you could help.

Input must be received in the Office of the Secretary no later than 30 April 2005. Submit suggestions to John Graham, AAS Secretary, by email to aassec@aes.org or at the Department of Terrestrial Magnetism, 5241 Broad Branch Road, N.W., Washington, DC 20015, Tel:202-478-8867, Fax: 202-478-8821.

AAS Election

The results of the latest AAS election are presented below. The Society thanks all who agreed to stand for election, for their commitment and service to the community, and congratulates the winners. New AAS Officers and Councilors begin their terms after the Annual Business Meeting on 1 June 2005 at the Minneapolis Meeting.

President (2006-2008)

J. Craig Wheeler

Vice-President (2005-2008)

Paul A. Vanden Bout

Treasurer (2005-2008)

Hervey (Peter) Stockman

Councilors (2005-2008)

Lee W. Hartmann
Suzanne L. Hawley
James S. Ulvestad

Pub Board Chair (2005-2008)

Michael F. A'Hearn

Nominating Committee (2005-2008)

John Bally

USNC-IAU, Category I (2006-2008)

Paul W. Hodge

AAS BYLAWS

The Council of the AAS has recommended the change below to the Society's Bylaws. In accord with the Bylaws, we are notifying the members of this pending revision and soliciting comments. Comments should be directed to the Society's Secretary and will be considered when the Council takes up these revisions at its meeting in May of this year. The present Bylaws text may be found on pages 27 through 33 of the 2005 AAS *Directory*.

Add to the end of Article I. Membership, Section 1. Classes of Membership:

h. Any individual who would qualify for membership under b or c above who is resident outside the United States and its territories may become an International Affiliate of the Society. These individuals may participate in the activities of the Society or the relevant Division, as appropriate, but may not vote, hold office, or serve on AAS Committees. The Council shall establish the qualification process, dues, and privileges for International Affiliates.

The intent is to allow limited participation in AAS activities by astronomical colleagues from other parts of the world. The particular benefits under consideration are receipt of electronic copies of the AAS *Newsletter* and electronic bulletins, listing in the *Directory*, but not receipt of a paper copy, and participation at AAS meetings at member rates.

COUNCIL ACTIONS

Council Actions Taken at the 205th Meeting of the Council of the American Astronomical Society in San Diego, California, 9 January 2005

1. Adopted the Minutes of the AAS Council's 204th Meeting (Denver).
2. Approved Executive Committee actions taken between May 30th, 2004 and January 9, 2005.
3. Approved the posting of a proposed Bylaws change regarding the establishment of a new class of "Affiliate Membership."
4. Passed a motion to continue to award the Annie J. Cannon prize and for the Society to resume its administration.
5. Moved to hold the 2008 summer meeting in St. Louis, Missouri and the 2009 summer meeting in Pasadena, California, subject to satisfactory site inspections and contract negotiations in each location.
6. Approved a request from the Historical Astronomy Division to provide travel support for representation at the ICOMOS meeting, sponsored by UNESCO, on the preservation of historical sites.

7. Moved to use the income of the Neesman fund to augment the money available for the Chrétien awards.
8. Endorsed broadening the participation of amateur astronomers in the activities of the Society.
9. Approved the motions that were passed by the Publications Board at its annual meeting in Nov 2004.
 - a. *The Bulletin of the American Astronomical Society* will no longer publish the Observatory/Department Reports.
 - b. The Executive Officer was encouraged to continue his efforts to provide access to the AAS Journals by third-world countries.
 - c. The *Astrophysical Journal* Editor in Chief will establish the position of Consulting Editors for the *ApJ*.
 - d. *ApJ*, *ApJ Letters*, and the *AJ* subject indices will no longer be published in print form. An author index will be compiled and printed but only in the final issue of the year.
10. Moved that the Working Group on Astronomy Education be dissolved and its activities transferred to the Astronomy Education Board at the end of the governance year.
11. Approved the American Astronomical Society Statement on the National Research Council Report on "The Assessment of Options for Extending the Life of the Hubble Space Telescope."
12. Passed a motion to accept the Pasadena Recommendations for Gender Equality in Astronomy from the Committee on the Status of Women in Astronomy.
13. Approved appointments of Lisa Frattare (Jan-June 2005) and Joan Schmelz (July 2005 onward) as Editors to the *AAS Women Electronic Newsletter*.
14. Received a report from the Committee on the Status of Minorities in Astronomy and approved the appointment of representatives on the selection committee for NSBP-AAS undergraduate scholarships.
15. Extended the term of the ad hoc Committee on Childcare until June 2005 with the understanding that it then be made a standing committee.
16. Appointed a search committee for a new Editor of the *Astrophysical Journal* to take office in June 2006.
17. Instructed the President to form a search committee for a new Executive Officer to take office on July 1, 2006.
18. Approved the recommendations from the committees for the Russell Lectureship, Education Prize, Pierce Prize, Warner Prize, van Biesbroeck Prize, and the Weber Award.
19. Approved new monetary amounts for the Society's prizes, effective 2005 and recommended that the Van Biesbroeck prize be awarded every two years after 2005 until its endowment is increased.
20. Accepted the Committee on Appointments nominations for new chairs of the prize committees and directed the Committee to fill out vacancies in the prize committees for approval at the next Council meeting.

DIVISION NEWS

HEAD

The San Diego meeting was an active time for High Energy Astrophysics Division members. Harvey Tananbaum and Marty Weisskopf collaborated on an outstanding Rossi Prize lecture, which brought out the huge variety of astronomical problems that have been transformed by observations using the Chandra X-ray Observatory. It was announced that the 2005 Rossi Prize will be awarded to Stan Woosley for his contributions to the study of nucleosynthesis, supernovae and, especially, the collapsar model of gamma ray bursts.

There were two well-attended HEAD sessions. One of these concerned the prospects for and the initial results from the Swift mission, which had just been successfully launched, the other covered the recently-organized NASA roadmap process and its implications for high energy astrophysics. HEAD members also listened to presentations from NASA officials describing the highly uncertain prospects for a variety of missions of interest. The next HEAD meeting will be held in the Fall of 2006 in the Bay area.

COMMITTEE NEWS

STATUS OF WOMEN IN ASTRONOMY

Patricia Knezek

CSWA Chair, WIYN Observatory, knezek@noao.edu

The CSWA would like to welcome Lisa Frattare (frattare@stsci.edu) to the editorial staff for the CSWA's weekly electronic newsletter, *AASWOMEN*. Lisa will serve as co-editor through the end of June 2005. Lisa is serving her second term as a member of the CSWA, and has served as an editor of the CSWA's biannual magazine, *STATUS*, among many other contributions. We look forward to her participation! We would also like to express our sincere thanks to outgoing *AASWOMEN* editor Michael Rupen. Michael did an exemplary job as co-editor during his tenure, and kindly agreed to continue as editor for six months after the end of his term on the CSWA so that we could identify a replacement. Thanks, Michael!

Equity Now: The Pasadena Recommendations for Gender Equality in Astronomy

The CSWA is pleased that the AAS Council voted without opposition to endorse the Pasadena Recommendations on 9 January 2005. These Recommendations were the result of the efforts of numerous people throughout the astronomical community, including participants who attended the "Women in Astronomy: Ten Years After" meeting in Pasadena in June 2003, various past and present CSWA committee members, and AAS members who reviewed and commented on the draft document

while it was posted on the AAS Members-Only website from July-September 2004.

The Recommendations are seen by the CSWA as a first step towards overall equity in astronomy, with the recognition that subsequent recommendations that focus on different areas and/or groups will be necessary to continue progress in the future. The endorsed version of the Recommendations is reproduced below. It can also be downloaded from the CSWA website in either pdf or word format, see: www.aas.org/~cswa. We encourage everyone to read through it.

Now that the Recommendations document has been endorsed, the CSWA has begun to actively work on ways to implement the various recommendations. A first step was to hold a panel discussion during the CSWA session at the January 2005 AAS meeting in San Diego. Panel members were Karen Bjorkman (U. Toledo), John Feldmeier (NOAO), Katy Garmany (Columbia U./NOAO), Barbara Mattson (GSFC), and Tammy Smecker-Hane (U.C. Irvine). The panelists were asked to prioritize the Recommendations from the perspective of their current career path (panelists represented graduate students to senior scientists). Interestingly, all five of the main Recommendation areas were highlighted by one or more of the panel members. This sparked an interesting discussion including some practical methods for implementation of some of the Recommendations. The CSWA plans to establish a website dedicated to providing information and links to resources to help institutions and individuals proceed with implementing the Recommendations. Look for more information about this website in upcoming AAS newsletters!

The Pasadena Recommendations

This document was endorsed by the American Astronomical Society (AAS) Council on Sunday, 9 January 2005, in San Diego, CA. This work is a collaborative effort made by many attendees of the "Women in Astronomy II: Ten Years After" meeting held in June 2003 in Pasadena with input and comments from the entire astronomical community. The document was presented to the members of the AAS Council by the 2003-2005 committee members of the AAS Committee on the Status of Women in Astronomy. Further information on implementing these recommendations may be found on our website: <http://www.aas.org/~cswa>.

"The first problem for all of us, men and women, is not to learn, but to unlearn." — Gloria Steinem

Guiding Principles

- Women and men are equally talented and deserve equal opportunity.
- Full participation of men and women will maximize excellence in the field.
- The measure of equal opportunity is outcome, *i.e.*, gender equity will have been attained when the percentage of women in the next level of advancement equals the percentage in the pool.

- Long-term change requires periodic evaluation of progress and consequent action to address areas where improvement is necessary.

Context

In 1972, the AAS established a working group on the status of women in astronomy, and followed in 1978 with the formation of an *ad hoc* committee on the status of women. The principle recommendation of the latter group was the appointment of a standing Committee on the Status of Women. This Committee on the Status of Women was established in June 1979, to monitor the status of women in the field of astronomy and to recommend changes to improve it. In 1992, a seminal meeting on Women in Astronomy was held in Baltimore, Maryland. This conference led to the Baltimore Charter for Women in Astronomy, which offered a rationale for and steps toward gender equity in astronomy. The Baltimore Charter was based on input from the astronomical community, and the American Astronomical Society endorsed its goals in January 1994. In the ensuing decade many institutions recognized that there are impediments to the success of women in science and have developed strategies to increase diversity. The Committee is encouraged by the progress that has been made but recognizes that major inequalities still exist. Consequently, a second meeting on Women in Astronomy was held in Pasadena, California, in June 2003. Participants assessed the progress for women in science, offered insights into causes of the slower advancement of women, and discussed strategies to accelerate the achievement of equality.

Approximately one fourth of professional astronomers are women, and the field continues to attract women and benefit from their participation. However, the data show that women are still less likely to advance than their male colleagues. Future progress toward parity demands that the field evaluate itself periodically and implement changes based on the latest demographic data and the most successful solutions. Therefore, the Committee, with input from both the Pasadena meeting participants and the larger community, offers a new set of recommendations for progress. These recommendations emphasize the academic sector because of its unique influence on the future of the field. The Committee understands, however, that these problems are not limited to either academia or astronomy and calls on all scientists to work together toward equality. Finally, the Committee advocates that the strategies developed for the sake of encouraging gender equality be adapted to address the even slower advancement of minority scientists.

This document continues astronomy's proud tradition of community attention to women's issues and the formation of a consensus set of recommendations. Without continued positive action, progress toward diversity could halt or even reverse. Together, astronomers can improve the diversity of the community, draw on a broader talent pool, and thus remove impediments to achieving excellence in science.

Major Areas of Concern & Subsequent Recommendations

The following are specific areas of concern and possible recommendations to help improve gender equality in these areas through various methods. The individual areas include: A. Tenure- ➤

Track Hiring, B. Career Advancement and Recognition, C. Institutional Policies, D. Varied Career Paths, E. Cultural Issues, and F. Statistical Information.

A. Tenure-Track Hiring

Traditional hiring practices may work against women as candidates for tenure-track positions in research universities, large national observatories, and science institutes. Statistics show that the fraction of women in the tenure-track pool has increased over the last two decades, but the fraction of women in tenure-track positions has not grown commensurately. It is the clear responsibility of research organizations to take affirmative steps to ensure that all viable candidates for tenure-track positions are identified and given equal opportunity both for hiring and success. While specifically calling out tenure-track hiring as an area of immediate concern, we recognize that the same practices should be applied to hiring for *all positions*. In this spirit, we make the following recommendations to these organizations.

Recommendations

1. *Ensure that all search committees for tenure-track positions contain two or more members whose specific task is to advocate for consideration of candidates from groups that are underrepresented in astronomy.*
2. *Require that search committees be informed about what constitutes legal and ethical hiring practices.*
3. *Actively recruit women to apply for tenure-track positions.*
4. *Develop policies encouraging flexible means of accommodating dual-career couples.*
5. *Require accountability in the hiring process, using appropriate institutional channels, so that results are commensurate with the possible candidate pool.*
6. *If two candidates for the same position have equal qualifications within the uncertainties, the candidate from the underrepresented group should be hired.*

B. Career Advancement and Recognition

The “classic” career path for a professional astronomer has been a progression through undergraduate and graduate school, a postdoc or two, and then a research faculty job at a major university. Statistics indicate that women are lost from this “progression” in proportion greater than for men, for a variety of reasons such as unsupportive work environments, lack of role models, and insufficient opportunity for recognition of their performance. Recognition often comes in the form of professional awards and invited presentations, where women frequently have been underrepresented relative to their achievements. Informal mentoring is easy and widespread for young people who resemble those already in the field but often is nearly inaccessible to those from underrepresented groups. We offer several recommendations to ameliorate this situation:

Recommendations

1. *Academic institutions should provide regular evaluation, mentoring and career counseling to young faculty members.*
2. *Universities and individual departments should set up formal programs to train mentors for younger students and professionals,*

with attention paid to both career and family issues. In addition, the AAS should sponsor periodic special sessions or short training programs at the semi-annual general meetings. The individual astronomy and physics departments then should take the responsibility of implementing a mentoring program, so that their more junior members have a mechanism to acquire support and advice. Specific areas of interest for training and mentoring would include information about rules (both written and unwritten), expectations, networking, and the general decision-making process of a particular institution.

3. *Ph.D.-granting universities should recognize the potential of graduate-student applicants from institutions that traditionally serve underrepresented groups. Departments should develop working relationships with faculty at these institutions, and establish specific mentoring programs for graduate students who may undergo “culture shock” upon arrival at a major research university.*

4. *Decisions on advancement should result from an open process, based on specific criteria that are spelled out in advance. Senior faculty and other senior personnel must provide an environment that enables all junior faculty to have an equal opportunity to succeed and advance in this process.*

5. *Organizations and academic institutions should offer women equal opportunity for scientific recognition in the form of awards (AAS awards and others) and invitations to present invited talks in a variety of circumstances, including AAS meetings, topical professional meetings, and traditional colloquia/seminars. Prize nominee pools and invited speaker lists should adequately reflect the diversity of the astronomical profession. The institutions responsible for selecting awardees and invitees should review periodically their policies and progress in this area, in order to ensure that the achievements of women are being represented fairly.*

6. *Along with direct contributions to science, criteria for success should include teaching and other functional terms of employment. Specifically, outreach and education activities are important both for the future of astronomy and in relation to possible career paths; involvement in such activities should be supported and rewarded at all levels, including hiring decisions and performance evaluations. Paradoxically, individual women sometimes are heavily burdened with committee service in an effort to achieve greater diversity; this additional service also should be recognized in advancement decisions.*

7. *The responsibility to create institutional changes that promote equity in astronomy lies first and foremost with the senior and more established members of an institution. However, individuals at a more junior level have a strong interest in such change and should participate as is feasible. In addition, these younger astronomers should not be thwarted by apparent barriers, but should enthusiastically pursue their own goals and dreams for scientific achievement and career advancement.*

C. Institutional Policies

Institutions have a responsibility to change the face of our profession, by developing and implementing policies that are friendly to women and that ensure equal access to all benefits and opportunities that will help them advance in their careers. Many institutions have policies that are limited in scope or outdated. This is particularly important in view of the “tidal wave” of young women currently at the entry level in astronomy; note that more than 50% of AAS members 18-23 years of age are women, but the fraction of women decreases systematically at later career stages. Consistent policies that are supportive of diversity, among institutions that grant degrees in astronomy or employ astronomers, play a critical role in “leveling the playing field” for women astronomers.

Recommendations

1. *All institutions should establish and promote strong policies and training in the areas of sexual harassment and general ethics, including clear complaint paths and accountability, taking care that these policies apply both to permanent employees and to short-term visitors (e.g., students and visiting observers).*
2. *Institutions should endorse and implement the Statement on Gender Equity in Academic Science and Engineering signed by the presidents of MIT, Harvard, Yale, Princeton, Penn, Michigan, Stanford, Berkeley, and Caltech in January 2001. The AAS should maintain a public list of institutions and organizations that endorse this Statement.*
3. *Members of the departments granting degrees in astronomy or employing astronomers should work proactively with their institutions to establish policies that allow all department members access to affordable health and childcare. This access should not be reserved only for faculty, but be extended to graduate students, post docs, research and administrative staff as well.*
4. *All job applicants should be made aware of institutional policies and benefits (e.g., health care, childcare, leave policies, spousal/partner hire policies, spousal/partner job search assistance, and retirement) provided at all levels.*

D. Varied Career Paths

Many, if not most, professional astronomers in the U.S. are employed in positions other than tenure-track positions at major research universities. Examples are employment at national or private observatories, NASA centers and contractors, science data centers, colleges that do not grant Ph.D.s, planetaria, industry, or in various roles in science or university management. The paths to these roles typically are not well understood, nor are the opportunities available to develop skills that are useful in these various types of positions.

Recommendations

1. *Academic departments should encourage outside training in non-research fields, such as program/project management or*

science policy, in order to prepare their students for the possibility of future careers in managing a variety of scientific endeavors. This may include, for example, courses outside the academic department or department seminars given by people in various related careers.

2. *Educational institutions that are co-located with related industrial employers, research institutions, or observatories should establish specific programs that enable students to “cross-train” between the university and the other organizations. Likewise, informal and formal science discussions, mentoring groups, seminars and colloquia, etc. at these professional institutions should have an open door policy and encourage student participation.*

3. *Mentoring programs such as that recommended in the section on “Career Advancement and Recognition” should include discussions and explorations of options outside the traditional faculty progression; astronomy departments should work with their university’s career development centers, and with their own graduates, to provide information about these options to their undergraduate and graduate students.*

E. Cultural Issues

Some of the strongest, but most difficult to quantify, reasons that individuals from underrepresented groups can feel disadvantaged arise from a mismatch with the majority “culture” — *i.e.*, implicit norms and expectations of behavior. Specific recommendations that are made above would go far toward dealing with some of these issues in terms of policies and practices, but there remains a large gray area of subtle cultural issues that contribute to the underrepresentation of women in tenured and other leadership roles. In the words of Jocelyn Bell Burnell (*Science* **304**, p. 489, 2004): “Women and minorities should not do all the adapting. It is time for society to move toward women, not women toward society.”

Recommendations

1. *Institutions should encourage gender-equity training and make it available at all levels. This should include discussions of the well-studied effects of subtle discrimination, unconscious bias, and the accumulation of disadvantage.*
2. *In an era in which the ability to work within a large team is becoming increasingly important for scientific success, departments should foster a collaborative and team-oriented approach rather than just the more traditional, competitive scientific culture. Responsibilities and rewards should be shared equitably in the team environment. It is also expected that such a team should be composed of diverse members of the department, where appropriate (for example, men and women, junior and senior faculty, students, etc.).*
3. *Good communication channels should be maintained and encouraged throughout academic departments and laboratories, both within peer groups and spanning traditional hierarchical*

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levels. Department chairs should organize regular opportunities for two-way communication throughout the hierarchy.

4. *Institutions should ensure that a career in research is compatible with having a family*; professional activities (e.g., class and meeting schedules) as well as employment benefits (e.g., childcare, family leave, etc.) should be developed with this specific goal in mind.

F. Statistical Information

Evidence of the underrepresentation of women in the astronomical community relies on insufficient long-term statistical data. Recent studies (e.g., Hoffman in WIA-II proceedings) indicate that there still is a “leaky pipeline” in the road to tenure-track positions in astronomy. At present, more than half of the AAS members in the range of 18-23 years of age are women, and one-third of the astronomy graduate students are women, but women occupy fewer than 15% of the astronomy tenure-track positions. Better longitudinal data, specific to astronomy, are needed to assess women’s representation and to assess the effectiveness of remedies. The issue of statistics must be recognized for its central importance to understanding the social and cultural forces that shape the characteristics of our field.

Recommendations

1. *The American Astronomical Society should commission immediately a longitudinal study of young women in astronomy, beginning with those aged 18-23 in 2003.* A similar group of men should be used as a comparison sample. Both subjects that remain in the field and those that leave the field should continue to be tracked for the duration of the study. The AAS should commit to continue this study for at least 10 years, in order to establish statistics on retention and career paths for this cohort. Professional sociologists, using accepted statistical techniques, should carry out this study. One goal of this study would be to measure whether there is differential attrition of women from the pipeline and if so, to learn the reasons for it.

2. *The AAS should form a “Committee on Statistics” whose main objective would be collecting, analyzing and reporting data on the demographics of our field.* This committee could work closely with the CSWA and other relevant AAS committees (as well as organizations such as the National Science Foundation and American Institute of Physics (AIP) that conduct their own surveys). This committee should provide complete and regular access to statistics on items such as gender balance, the fraction of beginning students who earn their Ph.D., and the mean time to completion.

3. *The above mentioned committee’s prime focus should be to examine the demographic status of the AAS membership and the astronomical community in a three-fold approach:* (a) mining standardized yearly departmental reports (using those currently administered by the AIP) for statistical information, (b) administering and analyzing in depth periodic surveys (every 2 to 3 years but no more than 5 years between surveys) similar to the STSci/CSWA survey, and (c) giving input to and reporting results from longitudinal studies.

NEWS FROM...

NATIONAL SCIENCE FOUNDATION

Eileen D. Friel, efriel@nsf.gov

Executive Officer, Division of Astronomical Sciences

Update on Grants Programs

The AST Astronomy and Astrophysics Research Grants program received a record number of proposals for FY2005 funding. Of the 439 proposals received, seven were returned without review for failing to address explicitly both of the NSB merit review criteria in the proposal summary. The requirement is that both review criteria be addressed. In our administrative review of compliance we make no judgment about the quality of the statements addressing the criteria; only whether they are addressed or not. **PI’s must recognize that this is an NSF-wide policy issue and that the Division has essentially no latitude in the action we can take.** We urge everyone submitting proposals to any NSF program to provide separate paragraphs in their proposal summary that address each of the review criteria of intellectual merit and broader impact. Write your summary so there is no doubt that you have met the requirement. Do not leave the judgment to someone’s interpretation.

The Grant Proposal Guide sets out the requirements for preparation and submission for all proposals to NSF. The GPG changes regularly and we urge proposers to look carefully at the current version any time they are submitting proposals to NSF. Do not assume that the requirements that held last time you submitted apply now. The Astronomy Division has been very flexible in the past in allowing proposals that did not meet certain of the technical requirements, such as font and margin size, format and content of biographic material (particularly lists of collaborators), and the inclusion of results of prior NSF support. We have the authority to return without review proposals that do not meet these requirements and many divisions in NSF follow that practice. AST will consider taking this drastic action in the future for proposals that do not conform to requirements that we consider critical to the integrity of the review process. See the GPG at <http://www.nsf.gov/pubs/ods/getpub.cfm?gpg>. If you have any questions in preparing a proposal, feel free to contact an NSF Program Officer.

Panel review

In 2001, AST merged the separate disciplinary grants programs of Planetary, Stellar Astronomy and Astrophysics, Galactic, and Extragalactic Astronomy and Cosmology into the Astronomy and Astrophysics Research Grants Program (the AAG). Although we still have program officers with expertise in each of these areas who manage the review and administration of proposals, the formation of the AAG has allowed us to approach the review and the funding of proposals in a much more coordinated and inclusive manner than previously. This new organization has also changed

significantly the structure of review panels to be more responsive to changing research focus in the community and to proposals that span the formerly more rigid program boundaries. For example, over the past several years, a panel on stellar populations has included proposals that might formerly have been found in either Stellar (since they treated individual stars), Galactic (because they addressed galactic structure) or Extragalactic (because they looked at local group galaxies). Similarly, a panel on MHD contains exclusively theory proposals that address MHD processes from a stellar to a galactic scale. It is not uncommon to have several panels each year that contain primarily or exclusively theory proposals.

We also may review a proposal in more than one panel to ensure that all aspects of the science proposed are evaluated by the most qualified reviewers. This flexibility in panel definition on an annual basis allows us to compose panels that contain expertise well tailored to the proposals in any given year. The details of panel subjects will change from year to year as the balance of proposals by topic changes.

So if you still submit your proposal to one of the administrative programs of PLA, SAA, GAL, or EXC, you may find it reviewed and administered in a different program depending on the panel assignment. We urge all proposers to submit their proposals to the AAG umbrella program and we will find its best administrative home depending on the structure of our review panels that year.

DOE joins the AAAC

The NSF authorization act of 2003 created the joint NSF and NASA Astronomy and Astrophysics Advisory Committee (AAAC), charged with providing advice to both agencies on issues such as coordinating the development of strategic plans and identification of areas that might benefit from coordinated activities. Recent legislation has now made this a tri-agency advisory committee by adding the Department of Energy to NASA and NSF. Each agency appoints members to the committee (four each from NASA and NSF; three from DOE, two from OSTP) and the committee provides its annual report to the heads of each agency as well as Congressional committees, OMB and OSTP. All AAAC reports, as well as information on membership and meeting activities can be found on the AAS web site, at www.aas.org/aaac/.

SPACE STUDIES BOARD

www.nationalacademies.org/ssb

SSB Seeks Input for Study on NASA Astronomy Centers

NASA supports an array of astronomy centers, which are intended to maximize the scientific output and productivity of space astronomy missions by facilitating the scientific community's access to and use of space observatories. Most centers provide a

number of supporting roles, which often include some of the following:

- review of observing time or archival data use proposals,
- scheduling observing time allocations and campaigns,
- operating the observatory,
- monitoring and managing scientific instrument and/or spacecraft systems performance,
- defining and developing analysis software,
- performing data processing,
- issuing grants
- technical assistance for guest observers,
- development and management of data archives,
- facilitating communications between the research community and NASA on behalf of specific space missions, and
- performing public affairs, outreach, and education activities.

The Space Studies Board will organize a review of lessons learned from experience with NASA's ensemble of space astronomy science centers and will recommend a set of guiding principles and best practices for consideration in making decisions about approaches to meeting the needs of the astronomy community with future science centers.

The study will include the following tasks:

1. Conduct a comparative review of current astronomy science centers in terms of the kinds of roles and services that they provide, their size (e.g. budget, staff), the extent to which they utilize centralized or distributed approaches to their architecture, the roles and status of their staff, the nature of their host or governing institution, governance structure, how they were established by NASA (e.g. sole source vs. competition).
2. Identify best practices and lessons learned from experience to date with NASA astronomy science centers.
3. Assess the questions of whether there are optimum sizes or approaches for science centers, whether there are rational break points in levels of service for centers, and what may be significant advantages or disadvantages for different scales of service.

The study will consider all aspects of centers' service to the astronomy community, including space mission operations planning, data processing and archival, grants to observers and data users, science community communications and advocacy. The study is not intended to be a performance review of current centers, but it is expected to provide an assessment to serve decision-making with regard to future centers.

We Invite Your Input

We welcome your input on best practices and lessons learned for astronomy centers and other perspectives regarding NASA astronomy centers that you would like to share. Please provide your comments to ssb@nas.edu by 30 March 2005.

ASTRONOMY & ASTROPHYSICS

Aage Sandqvist

Chairman, A&A Board of Directors

New policy concerning expanded European *and* non-European A&A memberships

It is now thirty-five years since the scientific journal *Astronomy & Astrophysics* (A&A) was founded by the merging of six national journals from four European nations, namely France, Germany, the Netherlands and Sweden; Belgium and the other Nordic countries, Denmark, Finland and Norway, also participated. They were subsequently joined by five other western European nations, namely Austria, Greece, Italy, Spain and Switzerland (Norway later withdrew). A&A has no international legal status as such but is represented by the European Southern Observatory (ESO), which also manages its financial transactions.

In the nineteen-nineties, A&A incorporated eastern European countries into its sponsoring membership: the Czech Republic, Hungary, Poland, the Slovak Republic and Estonia. A&A was now truly “A European Journal”, as then stated on the front cover.

In the meantime, A&A grew in importance as a vehicle for world-wide dissemination of astronomical research and an ever-increasing number of high-quality papers began streaming into the A&A Editorial offices from non-European countries, as well as from other European non-member countries. It became obvious to us that A&A no longer was merely a European Journal and in 2001 we removed the “A European Journal,” from the front cover.

Eventually, some of these non-European countries began approaching us with queries about potential membership in A&A and in 2002 we admitted the first such country, Argentina, with an observer status. Meanwhile, the Board intensified its study of the financial and administrative consequences of a wider expansion including the admission of member countries beyond Europe – a special subcommittee was appointed.

The Board of Directors, at its meeting in Tartu, Estonia on 8 May 2004, made the important decision that A&A *will henceforth consider applications for sponsoring membership from any country in the world with well-documented active and excellent astronomical research*. Each application will be carefully treated on a case-by-case basis. Subsequently, at this meeting, the Board admitted Argentina to full membership in A&A starting on 1 January 2005. In addition, three other applicants were admitted to observer status, namely Brazil, Chile and Portugal.

The national membership in A&A is financed generally by a national science foundation, a national academy or a national committee. The national contribution is based on the net national income of the member country and is used to cover the expenses of the editorial offices. Authors from a member country pay no page charges for papers published in A&A. For further details, see the home page of the A&A Board of Directors at www.aanda.org.

CANADIAN ASTRONOMICAL SOCIETY (CASCA)

Jim Hesser, President, CASCA

In 1999-2000, Canada’s first Long Range Plan for Astronomy and Astrophysics, *The Origins of Structure in the Universe*, developed by a distinguished panel chaired by Ralph Pudritz was released. The LRP represents a vision for multi-wavelength astronomy involving complementary activities and facilities addressing the most fundamental questions of modern astrophysics. It also addresses human resource, education and public outreach issues, and portrays the socio-economic benefits arising from investing in our field.

Subsequently the Coalition for Canadian Astronomy, consisting of representatives from CASCA, academia and industry, lobbied vigorously for LRP funding. Not all funding goals for the first five years have (yet!) been achieved. However, substantial partial funding—primarily through the Canadian Space Agency (CSA) and the National Research Council of Canada (NRC)—has allowed Canadian participation in the LRP’s highest priority new initiatives in space- and ground-based astronomy (in the form of international partnerships in JWST and ALMA, respectively). As well, the funding has enabled Canadian R&D on the Very Large Optical Telescope (now the TMT project), the Square Kilometre Array, computational astrophysics, the Virtual Observatory, as well as on other LRP goals.

In 2004 CASCA carried out a Mid-Term Review (MTR) of the LRP by a committee of great experience led by Ernest Seaquist. Completed in November 2004, the MTR thoroughly assesses the progress to date on LRP implementation, and makes specific recommendations for the funding necessary to meet the LRP goals. The MTR factors in the strong impact that the Canada Foundation for Innovation is having on university research funding since its inception at the time the original LRP was being finalized, as well as the development in 2004 of the Association of Canadian Universities for Research in Astronomy (ACURA) that brings together 21 universities to pursue projects of national interest. The Coalition for Canadian Astronomy co-chairs from CASCA, ACURA and industry, supported by individual CASCA members, are now lobbying the Federal Government for the support called for in the MTR.

Nearly all LRP activities in Canada are conducted in an international context, including many with organizations and individuals based in the U.S. Interested members of the AAS are invited to view both the LRP and its Mid-Term Review on the CASCA web site (<http://www.casca.ca/>).

At the same site you will find links to CASCA’s 15-17 May 2005 annual meeting being hosted by the Université de Montréal. The scientific theme, Canadian Astronomy in Space, highlights activities of Canadian astronomers in the use of space-based astronomical instruments, as well as the role of the Canadian Space Agency, located in nearby Saint-Hubert, in the development and support of Canadian astronomical activities in space.

ANNOUNCEMENTS



Still Available — *The American Astronomical Society's First Century*

This special volume was issued to celebrate the centennial of the AAS in 1999. Edited by David DeVorkin, this illustrated volume contains 30 chapters tracing the history of the AAS from its founding until the end of the twentieth century. Several articles

address the structure of the modern AAS, with headquarters in Washington, five Divisions, and responsibility for three of the premier journals in astronomy.

While copies remain these may be ordered from the AAS Executive Office at a price of \$20 for domestic orders and \$25 for oversea shipments.

Please send orders with check or credit card to the attention of Natalie Patterson, American Astronomical Society, 2000 Florida Ave. NW, Suite 400, Washington, DC 20009-1231

Is you member record up-to-date?

Personal, contact and address information can be updated online at the AAS website (www.aas.org). Click on "member login" and enter your login and password. Can't remember your password? Click on "My Login Information" and enter your email address.

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	2005 Jun 1	2005 Oct - 2006 Jan	
	2005 Oct 3	2006 Feb - 2006 May	
VLA	2005 Jun 1	2005 Oct - 2006 Jan	*
	2005 Oct 3	2006 Feb - 2006 May	+
VLBA	2005 Jun 1	2005 Oct - 2006 Jan	
	2005 Oct 3	2006 Feb - 2006 May	

Notes: (*) D configuration with a maximum baseline of 1 km. (+) A configuration with a maximum baseline of 36 km.

Large Proposals may be submitted to the VLBA at any deadline and to the VLA once every 16 months; the next such VLA deadline is 2005 Jun 1 for the period 2006 Jan to 2007 May. For more information on Large VLA/VLBA Proposals, see the web address cited below.

Users of NRAO instruments from most U.S. institutions may request travel support for observing and data reduction trips, as well as page charge support. In addition, a program to support GBT research by students at U.S. universities covers student stipends, computer hardware purchases, and student travel to meetings to present GBT results. Applications to this program are tied to GBT observing proposals. Awards of up to \$35,000 are possible.

The NRAO and the European VLBI Network jointly handle proposals for observing time on the Global VLBI Network at centimeter wavelengths; the deadline is 2005 Jun 1 for the session in 2005 Oct/Nov. Also, the NRAO and a set of European observatories jointly handle proposals for VLBI observing time at a wavelength of 3mm; the deadline is 2005 Oct 1 for the session in 2006 Apr. The NRAO also handles proposals for the High Sensitivity Array for VLBI at the same deadlines as for the VLBA; this Array includes the VLBA, VLA, GBT, and Arecibo in the U.S., plus Effelsberg in Germany.

Further information on NRAO instruments, proposal submission routes, and user support is available from the NRAO home page at www.nrao.edu.

NASA Infrared Telescope Facility Observing Proposals

Due date for the 1 July 2005 to 31 January 2006 semester is 1 April 2005. See <http://irtfweb.ifa.hawaii.edu/userSupport/indexota.html>. Available instruments include: (1) A 1-5 micron camera with a 0.04 arcsec/pixel scale and a circular variable filter; (2) A 1-5 micron cross-dispersed medium-resolution spectrograph (up to R=2,500); (3) A 1-5 micron high-resolution spectrograph (up to R=30,000); and (4) A 5-25 micron camera, and (5) PI-instruments including a low-resolution 3-14 micron spectrograph and high-resolution spectrographs for 8-25 microns. Information on available instruments can be found at: <http://irtfweb.ifa.hawaii.edu/>.

NSO Observing Proposals

The current deadline for submitting observing proposals to the National Solar Observatory is 15 May 2005 for the third quarter of 2005. Information is available from the NSO Telescope Allocation Committee at P.O. Box 62, Sunspot, NM 88349 for Sacramento Peak facilities (sp@nso.edu) or P.O. Box 26732, Tucson, AZ 85726 for Kitt Peak facilities (nsokp@nso.edu). Instructions may be found at <http://www.nso.edu/general/observe/>. A web-based observing-request form is at <http://www2.nso.edu/general/observe/obsform.shtml>. Users' Manuals are available at <http://nsosp.nso.edu/dst/> for the SP facilities and <http://nsokp.nso.edu/> for the KP facilities. An observing-run evaluation form can be obtained at ftp://ftp.nso.edu/observing_templates/evaluation.form.txt.

Proposers are reminded that each quarter is typically oversubscribed, and it is to the proposer's advantage to provide all information requested to the greatest possible extent no later >

than the official deadline. Observing time at National Observatories is provided as support to the astronomical community by the National Science Foundation.

NRAO Jansky Lectureship

The National Radio Astronomy Observatory invites nominations for the 2005 Jansky Lectureship (<http://www.nrao.edu/jansky/janskyprize.shtml>). The Karl G. Jansky Lectureship is an honor established by the trustees of Associated Universities, Inc., to recognize outstanding contributions to the advancement of astronomy. First awarded in 1966, it is named in honor of Karl G. Jansky who, in 1932, first detected radio waves from a cosmic source.

Please send nominations, including a supporting paragraph, by 1 April 2005, via e-mail to brodrigu@nrao.edu or via regular mail to the Division of Science and Academic Affairs, National Radio Astronomy Observatory, 520 Edgemont Road, Charlottesville, VA, 22903-2475.

First Call for Contributions for September 2005 Education and Public Outreach Conference

Building Community: The Emerging EPO Profession - held 14-16 September 2005 as part of ASP's 117th Annual Meeting in Tucson, Arizona, is now accepting proposals for contributed 30-minute clinics, two hour participatory workshops, and posters. This international meeting is focused on building and supporting a vibrant and connected community of individuals and groups engaged in education and public outreach (EPO) in the disciplines of astronomy, astrobiology, space, and earth science. This conference is specially designed for individuals who are bringing the excitement of astronomy to non-astronomers with the shared goal of improving the quality and effective dissemination of education and public outreach efforts. Proposals received before 1 March will receive the highest priority for consideration and are only accepted online at <http://astrosociety.org/events/meeting.html>.

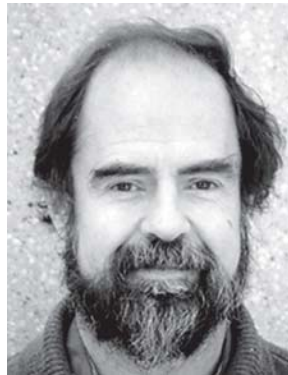
HONORED ELSEWHERE

AAS Members Receive 2005 Crafoord Prize

AAS members **James E. Gunn**, Princeton University, New Jersey; **P. James E. Peebles**, Princeton University, New Jersey and **Sir Martin J. Rees**, Cambridge University, UK were awarded the Crafoord Prize in Astronomy for contributions towards understanding the large-scale structure of the Universe.

Gunn first made theoretical contributions to the field of galaxy formation, the gaseous medium between galaxies and the presence of dark matter in galaxies. Peebles predicted the existence and some of the most important properties of the microwave background radiation already in the 1960s; and Rees early on recognized the importance of dark matter for the formation and properties of galaxies.

2005 PRIZE WINNERS

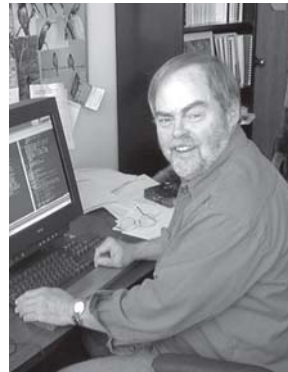


James E. Gunn
Princeton Observatory

Henry Norris Russell Lectureship

Citation states: For contributions to observational, instrumental, and theoretical astrophysics that have informed our understanding of the universe and a large fraction of its contents, including Gunn-Peterson absorption in quasar spectra, weak

gravitational lensing, galactic and stellar dynamics, pulsars and quasars, and the objects of study of numerous spectrographs, cameras, and the Sloan Digital Sky Survey.



Eric Greisen
National Radio Astronomy Observatory

Van Biesbroeck Prize

Citation states: The 2005 Van Biesbroeck prize is awarded to Dr. Eric Greisen of NRAO for the initiation, development, and maintenance for twenty-five years of the Astronomical Image Processing System (AIPS). Virtually every VLA

and VLBA program relies on AIPS for calibration and image reconstruction, and it has been exported to more than 500 sites worldwide. Greisen, as its principal architect and tireless custodian, has provided an invaluable service to astronomy. Moreover, AIPS represented a new paradigm for the processing of massive astronomical datasets, i.e., a comprehensive software package that was rigorously independent of particular operating systems, which supported portability and adaptability to evolving hardware designs. Beyond the call of duty, Greisen has generously responded to individual queries about the code from users at all levels, sometimes in real time at odd hours to support observations in progress.



Stephen A. Sheckman
Carnegie Observatories

Joseph Weber Award for Astronomical Instrumentation

Citation states: Dr. Stephen Sheckman is awarded the Weber prize in recognition

of 30 years of development and use of innovative spectrographs, his leadership as Project Scientist for the Magellan telescopes, and the positive impact that his designs and equipment have already had on astronomy.



Christopher Reynolds
Dept. of Astronomy, University of Maryland

Helen B. Warner Prize

Citation states: The AAS awards the Helen B. Warner Prize for 2005 to Dr Christopher Reynolds of the University of Maryland for his pioneering work on black hole astrophysics and testing the predictions of general relativity. He

is widely respected for his expertise in both the observational and theoretical aspects of X-ray astronomy. He has developed powerful tools for analyzing the geometry and gas dynamics of the strong gravity regions around black holes and has played a leading role in the study of X-ray line emission from putative spinning supermassive black holes. Dr. Reynolds has also made major contributions to understanding the energy budget in clusters by connecting his simulations of radio source dynamics to observations of X-ray emitting gas. He is playing a leading role in the future of X-ray astronomy on the science teams for SWIFT, Constellation-X and MAXIM.



Andrew Blain
California Institute of Technology

Newton Lacy Pierce Prize

Citation states: The AAS awards the Newton Lacy Pierce Prize for 2005 to Dr. Andrew Blain of the California Institute of Technology for his outstanding contributions to sub-mm and far-IR astronomy. Dr Blain predicted and then spearheaded the “revolution” in cosmology that

occurred with the use of the SCUBA bolometer array to study dusty galaxies in the distant universe. He also led the multi-wavelength observational effort to determine redshifts for these sources and established that the massive galaxies detected with SCUBA are at high redshift. His work has shown that a dominant fraction of the star formation in the universe occurred in dust-enshrouded galaxies, not detected in optical surveys, thus transforming the prevailing view of galaxy formation. He has also made important contributions in the fields of gravitational lensing and gamma ray bursts.



Laurence A. Marschall
Gettysburg College

AAS Education Prize

Citation states: For his worldwide contribution to the education of astronomy students through the

creation and guidance of the Contemporary Laboratory Experiences in Astronomy project, with a clear vision of the needs of the community and an uncompromising fidelity in the simulation of observational research.

For his engaging energy in the education of his own undergraduate students and special efforts to expose them to real observational research.

For his outreach to the public through popular books and articles, and his service as deputy press officer of the American Astronomical Society.

L-R: Students Holly Sheets, Maria Barrios, and Rob Vary, all Gettysburg College physics majors, and Colleague, Dr. Jacquelynne Milingo (Franklin and Marshall College) and Laurence A. Marschall. (National Undergraduate Research Observatory [NURO] telescope operated by Lowell Observatory, March 2003.)



George Efstathiou,
Institute of Astronomy
Simon White, MPI fur
Astrophysik

AAS/AIP Heineman Prize

Citation states: The 2005 Dannie N. Heineman prize for Astrophysics is awarded jointly to George Efstathiou and Simon White, in recognition of their pioneering research, both together and separately, into the evolution of structure in the Universe from the earliest times to the present epoch, as examples of outstanding work in the field of astrophysics.

(Photo: Efstathiou and White at a friend's wedding.)

SAN DIEGO MEETING IS RECORD BREAKER!

The 205th meeting of the AAS (9-13 January 2005 in San Diego, CA) was our largest ever, with more registrants (2456), more on-time abstracts (up 22% over the previous record), and more talks based on new doctoral dissertations (70) than any previous meeting. The weather seemed to bode ill at the start of the week: heavy rains caused mudslides that prevented the AAS tour to Palomar Observatory on Sunday, 9 January, and caused flood waters to rush by the meeting site. By Wednesday, however, the sky had cleared and an evening press tour to Palomar went off without a hitch, with reporters treated to views of Titan, Saturn, and Comet Macholz, and more, courtesy of Caltech.

Journalists came to the meeting from three continents, and there were many reports in venues as distinct as the *New York Times*, *Hankook Ilbo* (a newspaper in Seoul), and *USA Today*, each of which sent expert science writers to attend. The newsmaking stories included the announcement of the detection of the signature of baryonic oscillations from the early universe in the large-scale distribution of galaxies (found independently by the 2dF survey and the Sloan Digital Sky Survey), the discovery of the lost star catalog of Hipparchos, preserved on an ancient Roman statue, and the identification of the largest known star (radius-wise, and counting only those that are close to spherical).

Besides papers on new findings in almost every area of astrophysics and cosmology, the content of the meeting ran the gamut from “Gadgets and Gizmos” that aid astronomy teaching to the rise of “intelligent design” that threatens science education in the USA. Agency officials addressed “Town Meetings” and there was a special late addition to the program, an evening informational session on plans for servicing Hubble Space Telescope.

The attendance at major invited talks, including the Russell Lecture by Martin J. Rees and an invited talk on the adventures of the Mars Exploration Rovers, by Steven W. Squyres, was well in excess of 2,000 and must have amazed old hands who can remember when the total membership of the AAS was just a few hundred. Several prizes were awarded, as noted in the photo section that follows.

Retiring *Astronomical Journal* editor Paul Hodge was honored for his 20 years at the helm of *AJ*. And the Society’s retiring Meetings Manager, Diana Alexander, was recognized for her 15 years of outstanding service with a special session of laudatory display papers, a surprise party, and more. Press Officer Steve Maran was also surprised with a brief ceremony and a large cake from the press corps, to mark 20 years of spreading the news about astronomy. *All pictures are AAS photos by Kelley Knight, © 2005, American Astronomical Society, unless otherwise stated.*



As record crowds jammed the meeting site, record rainfall flooded the adjacent property.



Huge throngs attended the major talks, including (shown here) the Russell Lecture by Astronomer Royal Martin J. Rees (Cambridge U.). Rees (left) received a certificate from AAS President Robert Kirshner.



Left-to-right: Participants in a “Black Holes Briefing” for the press were (l-to-r) Lance Miller (Oxford U.), Jane Turner (U. Md. Baltimore County & NASA GSFC), Jon Miller (Harvard-Smithsonian CfA) and expert commentator Fred Lamb (U. Illinois).



Emily Levesque (MIT) found the largest known star (radius-wise) while re-determining the temperature scale for supergiants at Lowell Observatory.



Hallways were crowded as astronomers rushed from session to session or took every available seat to work on email, papers and presentations.



Kate Su (U. Arizona) found that the disk around Vega is much larger than previously known. Sun Kwok (Academia Sinica, Taipei) was her professor in graduate school.



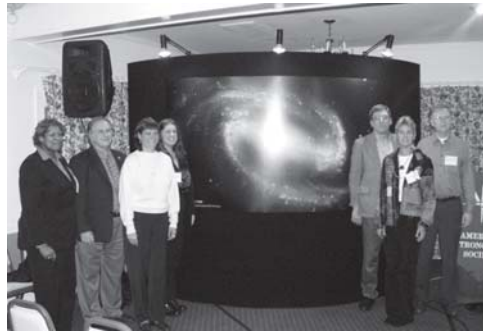
Ghassem R. Asrar, NASA's Science Deputy Associate Administrator, addressed the NASA Town Meeting.



Rodger Doxsey (right, Space Telescope Science Institute) received the George Van Biesbroeck Prize, "for long-term extraordinary or unselfish service to astronomy," from President Kirshner. AAS Photo by Crystal Tinch.



The panelists at a briefing on brown dwarfs and substellar companions were l-to-r Harry Shipman (U. Delaware), Lynnae Quick (North Carolina A&T State U.), Glenn Schneider (U. Arizona), Rachel Osten (NRAO), and Kate Su (U. Arizona).



Moments after a spectacular Hubble Heritage image of a barred spiral galaxy was unveiled at the AAS meeting, it was transmitted to museum video display walls and posted on the internet. The team responsible included (l-to-r) Cheryl Gundy, Ray Villard, Patricia Knezek, Lisa Fratarre, Zolt Levay, Carol Christian and Howard Bond. Knezek is at WIYN Observatory; the others are with Space Telescope Science Institute.



Gerard Williger (left, Johns Hopkins U.) investigated mysterious "blobs" at high redshift along with James Colbert (center) and Harry Teplitz, both of the Spitzer Science Center.



Michael Muno (left, UCLA) found stellar-mass black holes clustered near the galactic center. Silas Laycock (CfA) made a deep infrared survey of the region at the Magellan Observatory.



Paul Hodge laid down his pencil after 20 years as Editor of the *Astronomical Journal*. AAS Photo by Crystal Tinch.



Qiu-he Peng (Nanjing U., China) proposed a new explosion mechanism for Type II supernovae.



Judith Young (U. Massachusetts) told of the UMASS Sunwheel and the coming major lunar standstill.



Cosmologists who reported on the signature of baryonic oscillations from the Big Bang in the large-scale distribution of galaxies were (l-to-r) Daniel Eisenstein of the Sloan Digital Sky Survey (U. Arizona), expert commentator Martin Rees (Cambridge U.), and Richard Ellis of the 2dF Survey (Caltech).



Bradley Schaefer (left, Louisiana State U.) identified the lost star catalog of Hipparchos on a statue called the Farnese Atlas (he holds a replica). Expert commentator Owen Gingerich, holding his *The Book Nobody Read*, praised Schaefer's work and received the Education Prize at the AAS banquet.



Eugenie C. Scott (Natl. Ctr. for Science Education) described how creationism has raised its head anew as "intelligent design." Many of the audience came to greet Scott after her talk. Photo by Kevin Marvel.



NRAO radio astronomers at the meeting included Scott Ransom (left) who found a whole bunch of pulsars in globular cluster Terzan 5 with the Green Bank Telescope and Philip Jewell, Assistant Director for Green Bank Operations, who reported on the performance of the GBT.



Panelists at a briefing on solar system news were three U. Minnesota astronomers who studied comets with the Spitzer Space Telescope, l-to-r, Robert Gehrz, Charles Woodward, and Michael Kelly, a NASA Goddard researcher on Saturn, Amy Simon-Miller, and Williams College's Jay Pasachoff, who observed the transit of Venus with ACRIMSat.



Experts on gamma ray bursts who discussed the first results from the Swift satellite were, l-to-r, Shrinivas Kulkarni (Caltech), Swift Principal Investigator Neil Gehrels (NASA Goddard), and Mission Director John Nousek (Penn State U.).



Among those reporting on future technologies, instruments and observatories were Tony Tyson (at left) and Suzanne Jacoby (center) of the Large Synoptic Survey Telescope, Namir Kassim (right) of the Long Wavelength Array, and in the back row, Bruce Twarog (left) and Paul Etzel of Project ULTRA.



Martin Weisskopf (left, NASA Marshall) and Harvey Tananbaum (Chandra X-ray Center) shared the Rossi Prize and lectured on Chandra and what it has learned. Photo by Kimberley Kowal Arcand, courtesy of Chandra X-ray Center.



Robert Irion (second from left, Science magazine) was among the reporters questioning Glennys Farrar (New York U.) about her report on what may be the first known point source of ultra-high-energy cosmic rays. Robert Burnham (Astronomy) and George Musser (Scientific American) are at far left and right, respectively.



Jaymie Matthews (U. British Columbia) gave an invited talk on the first year of ultraprecise photometry from Canada's MOST space mission



Skip Barker (ScienceFilm) described plans for a weekly half-hour television program on astronomy and space exploration.



Bruce Draine (left, Princeton U.) received the Dannie Heineman Prize for Astrophysics from Marc Brodsky, CEO of the American Institute of Physics, and lectured on "Interstellar Dust."



"Gadgets and Gizmos" to help teach astronomy attracted the interest of many.



Among the most convivial attendees were Christopher Wanjek (left) who writes press releases for NASA and jokes for The Tonight Show with Jay Leno and Dana Berry, a space artist/TV animator who wrote Smithsonian Intimate Guide to the Cosmos. Photo by Michael McClare.



Antonella Nota (left, Space Telescope Science Institute) noted possible pre-main sequence objects in the Small Magellanic Cloud. Jeonghee Rho (center) and William Reach (both, Spitzer Science Center) described "spectacular, young and sequential star forming regions of the Trifid Nebula."



Eric Sauder (Hempfield H.S., Landisville, PA) studied relations between sunspots and flares. For this, he was awarded the 2004 Priscilla and Bart Bok Award of the ASP.



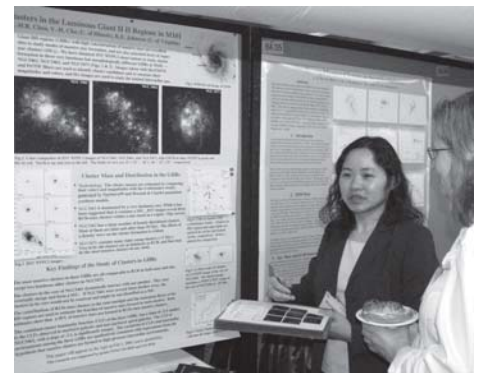
Crystal Martin (U. California, Santa Barbara), presented an invited talk on the role of feedback in galaxy formation.



Lisa Rios (left, Northern Arizona U.) found an unusual contact binary in Cygnus OB2 and shared the story with Sultana Nahar (Ohio State U.)



Steven Squyres, Principal Investigator for the Mars Exploration Rovers, told a full house about the discoveries of Spirit and Opportunity.



Rosie Chen (U. Illinois) studied the formation of star clusters in giant HII regions in M101.



Pamela Gay (Harvard U.) reported on open source instructional laboratory administration software for physics and astronomy instructors.



John Debes and Steinn Sigurdsson (both, Penn State U.) searched for planets around white dwarfs by high-contrast imaging with HST, Gemini North, and CFHT.

very important way, set general policy. These bills are prepared through hearings, where input is received from the taxpayers (either in the form of live testimony or submitted written comments or letters) and the interactions of the subcommittee staff with the agencies itself.

Congress guides the creation of the budget in two other ways. First, through the various authorization committees, which meet regularly, but especially in the early spring each year, to review federal programs and pass legislation that guides the work of the various agencies. These committees receive input from lobbyists, the public and the agencies as well as holding hearings on special topics. Second, there are special committees concerned with forming the federal budget, called the budget committees. Their job is to set out the Congressional budget structure in response to the President's budget request.

The President's budget request is released each year close to the date of the State of the Union Address, usually delivered in early February. The President's budget is prepared by an arm of the Executive Office of the President known as the Office of Management and Budget. This relatively small body builds the entire budget by meshing the President's political objectives with government agencies' long-term plans. These plans are developed over the year prior to the submission of the President's budget to Congress.

Overall, the whole process is about 2 years from initial conceptualization at an agency to the President signing the appropriations bill into law. It is a long and arduous process, but it is one that allows public input and comment. More important than that, it is possible to have an impact on the process itself. This is the key to our democracy, and a key that is seldom turned by scientists.

We can have an impact by interacting with agencies, but we need to plan ahead. Since it takes two years or more for an agency to develop a budget, we must act early to put our ideas into the process. This is why the decadal surveys are so important for astronomy and space science. By setting our objectives for the coming decade, we send a clear message to everyone in the policy process as to what projects are important scientifically in our field and the priority order in which they should be funded.

We can have an impact by interacting with Congress, but we need to be sure they are not in the final process of preparing appropriations legislation (summer) and not in the final process of undertaking authorization hearings (early spring) and not in the final process of preparing the Congressional budget bills (late winter). We must educate ourselves so we can educate Congress when they are receptive and when our message will have an impact. This is not hard...we are "rocket scientists" after all.

We can have an impact by interacting with the Office of Management and Budget. They do not need to work in a vacuum, but welcome input from the scientific community. But we must work with them in the late summer or fall, as they prepare the budget, not in February after they are taking a break from the last-minute hectic process of finalizing a multi-thousand page document for submission to Congress.

Timing is the key, but the AAS has resources to help. On our public policy pages, we maintain links to the Congressional calendar, current information on the policy process and links to other societies that track a wider range of issues than our office alone can track. Our goal is to enable you, our members, in taking your message to Congress and to have an impact.

Please feel free to contact me at anytime about public policy issues or to seek advice (marvel@aas.org). My job is to move astronomy forward in the public policy arena and I can only accomplish this goal with the help of all of our members.

Public Policy Sessions at San Diego Session

At the record attendance San Diego meeting, three public policy sessions were held, which drew a number of AAS members. The first, an invited lecture by Dr. Eugenie Scott of the National Center for Science Education was held in the main lecture space and was a packed crowd. Although the speaker estimated the attendance as 400 or 500, audience counts indicated numbers in excess of 1000 members. Dr. Scott leads a nationwide effort to keep science in the science classroom and religious teachings out of science class. You can find out more about this effort at the NCSE website (<http://www.ncseweb.org/>).

The other sessions were held in tandem, the first being a panel session on "Astronomy, Space Science and the New NASA" and the second on the HST Robotic servicing mission. Speakers at the first session included Amy Kaminski, the program officer at OMB for NASA; Neal Tyson of the American Museum for Natural History; Joe Alexander of the National Research Council; Roger Blandford, HEAD Chair; David Black, CAPP chair and Paul Hertz of NASA HQ. Some of the presentations of these speakers are available online at the AAS public policy web pages.

The second session featured video of the efforts to develop robotic servicing options for the HST and a question and answer session. If you have an idea for a session on public policy, feel free to submit them to me for future consideration or submit them on your own through our Special Session proposal submission tool www.aas.org/meetings/MeetingContent.html#how. We want the AAS meeting content to represent member interests and can only fulfill this goal with your help.

CALENDAR

AAS & AAS DIVISION MEETINGS

206th Meeting - Minneapolis, MN

29 May-2 June 2005

Contact Len Kuhi (kuhi@astro.umn.edu)

207th Meeting - Washington, DC

8-12 January 2006

Contact AAS Executive Office

gilmore@aaas.org

208th Meeting - Calgary, Alberta

4-8 June 2006

Contact Russ Taylor

russ@ras.ucalgary.ca

209th Meeting - Seattle, WA

(Joint with AAPT)

7-11 January 2007

Contact AAS Executive Office

gilmore@aaas.org

Division on Dynamical Astronomy

10-14 April 2005—Santa Barbara, CA

Contact: Roy Laubscher

(roylaubscher@vzavenue.net)

Solar Physics Division/AGU

23-27 May 2005—New Orleans, LA

Contact: Jim Klimchuk

(klimchuk@nrl.navy.mil)

Division for Planetary Sciences

4-9 Sept 2005—Cambridge, England

Simon Mitton, LOC

(smittin@cambridge.org)

Carl Murray, SPC

(c.d.murray@qmul.ac.uk)

http://www.dps2005.com/

OTHER EVENTS

Grand Challenge Problems in Computational Astrophysics

7 Mar - 10 Jun 2005 — Los Angeles, CA

Contact: Mark Morris

(pca2005@ipam.ucla.edu)

www.ipam.ucla.edu/programs/pca2005/

*Blazar Variability Workshop II: Entering the GLAST Era

10-12 April 2005 — Miami, FL

Contact: Dr. James R. Webb

(webbj@fiu.edu)

http://www.fiu.edu/~webbj/confer.htm

*The Paradoxes of Massive Black Holes: A Case Study in the Milky Way

14-16 April 2005—The Kavli Institute for

Theoretical Physics, UCSB

Contact: Jocelyn Quick

(jocelyn@kitp.ucsb.edu)

http://www.kitp.ucsb.edu/activities/

galactic_c05/?id=320

*2005 May Symposium: A Decade of Extrasolar Planets Around Normal Stars

2-5 May 2005—Baltimore, Maryland 21

Contact Quindairian S. Gryce

(gryce@stsci.edu)

http://www.stsci.edu/institute/conference/

may_symp

*Annual Meeting of the Canadian Astronomical Society 2005

15-17 May 2005 — Montréal, Québec,

Contact: Pierre Bergeron

(casca2005@astro.umontreal.ca)

http://www.astro.umontreal.ca/casca2005

*IAU Symposium No. 227

Massive Star Birth: A Crossroads of Astrophysics

16-20 May 2005 — Catania, Sicily, Italia

Contact: Peter S. Conti

(pconti@jila.colorado.edu)

http://www.arcetri.astro.it/iaus227

*AGU 2005 Spring Meeting Special Session P02: "X-rays From the Solar System and Beyond"

23-27 May 2005 New Orleans, LA, USA

Contact: Anil Bhardwaj

(Anil.Bhardwaj@msfc.nasa.gov)

http://www.agu.org/meetings/sm05/

?content=search&show=detail&sessid=41

*Physics of Astrophysical Outflows and Accretion Disks

23-27 May 2005— The Kavli Institute for

Theoretical Physics, UCSB

Contact: Jocelyn Quick

(jocelyn@kitp.ucsb.edu)

http://www.kitp.ucsb.edu/activities/

jetdisk_c05/?id=321

IAU Symposium No. 228

From Lithium to Uranium: Elemental

Tracers of Early Cosmic Evolution

23-27 May 2005 — Paris, France

Contact: Vanessa Hill

(Vanessa.Hill@obspm.fr)

http://www.gepi.obspm.fr/symp228/

index.php

*Astrobiology and the Origins of Life

Conference: 24-28 May 2005

Workshop: 30 May-10 June 2005

McMaster University, Hamilton, Ontario

http://origins.mcmaster.ca/

*The physics of the s-process

29 May-12 June 2005 — Aspen, CO

Contact: Falk Herwig (fherwig@lanl.gov)

http://wnr.lanl.gov/aspen05/

*LISA Data: Analysis, Sources, and Science

29 May-18 June 2005 — Aspen, CO

Contact: Matthew Benacquista

(benacquista@msubillings.edu)

http://www.astro.northwestern.edu/

AspenS05/index.html

*Submillimeter Astronomy: in the era of the SMA

13-16 June 2005 — Cambridge, MA

Contact: Paul Ho

(smast05@cfa.harvard.edu)

http://cfa-www.harvard.edu/smast05

*Inspiration of Astronomical Phenomenon Conference (INSAP) V

26 June-1 July 2005 — Chicago, IL

Contact: Marvin Bolt

(insapv@adlernet.org)

*Ultra-relativistic Jets in Astrophysics

11-15 July 2005 — Banff, Alberta

Contact: Rachid Ouyed

(jdevilliers@capca.ucalgary.ca)

http://www.capca.ucalgary.ca/meetings/

banff2005

*Star Formation in the Era of Three Great Observatories

13-15 July 2005 — Cambridge, MA

Contact: Scott Wolk

(stars05@cfa.harvard.edu)

http://cxc.harvard.edu/stars05

*Solar MHD: Theory and Observations - a High Spatial Resolution Perspective

18-21 July 2005 — Sunspot, NM

Contact: John Leibacher

(jleibacher@nso.edu)

www.nso.edu/general/workshops/2005

*Physics and Astrophysics of Supernova Neutrinos

18-22 July 2005 — Santa Fe, NM

Contact: Chris Fryer (fryer@lanl.gov)

qso.lanl.gov/meetings/meet2005/index.html

Michelson Interferometry Summer Workshop

24-29 July 2005 — Pasadena, CA
Dawn Gelino (dawn@ipac.caltech.edu)
<http://msc.caltech.edu/workshop/2005/>

***2005 SPD Summer School on Helioseismology**

24-29 July 2005 — Boulder, CO
Contact: Yuhong Fan (yfan@ucar.edu)
<http://www.hao.ucar.edu/summerschool>

9th Asian-Pacific Regional IAU Meeting (APRIM-2005)

26-29 July 2005 — Bali, Indonesia
Contact: Premana W. Premadi (premadi@as.itb.ac.id)
<http://www.as.itb.ac.id/APRIM2005>

***Neutron Stars at the Crossroads of Fundamental Physics**

2-6 August 2005 — Vancouver, BC
Contact: Jeremy S Heyl (hey1@physics.ubc.ca)
<http://www.physics.ubc.ca/~hey1/ns2005>

IAU Symposium No. 229

Asteroids, Comets, Meteors - ACM 2005
8-12 Aug 2005 — Rio de Janeiro, Brasil
Contact: Daniela Lazzaro (lazzaro@on.br)
<http://www.on.br/acm2005>

News, Expectations and Trends in Statistical Physics (NEXT2005)

13-18 Aug 2005 — Crete, Greece
<http://www.polito.it/next-sigmaphi>

***IAU Symposium No. 230**

Populations of High-Energy Sources in Galaxies
15-19 August 2005 — Dublin, Ireland
Contact: Evert J.A. Meurs (ejam@halley.dunsink.dias.ie)
www.dunsink.dias.ie/IAUS230/index.html

IAU Symposium No. 231

Astrochemistry throughout the Universe: Recent Successes and Current Challenges
29 Aug - 2 Sept 2005 — Monterey, CA
Contact: Eric Herbst (herbst@mps.ohio-state.edu)
<http://asilomar.caltech.edu/>

***Building Community: The Emerging Education and Public Outreach (EPO) Profession**

14-16 September 2005— Tucson, AZ
Contact: Tim Slater (tslater@as.arizona.edu)
<http://astrosociety.org/events/meeting.html>

IAU Colloquium No.200

Direct Imaging of Exoplanets: Science and Techniques
3-7 October 2005 — Nice, France
Contact: Claude Aime (Claude.Aime@unice.fr)
<http://www-luan.unice.fr/IAUC200.htm>

Protostars and Planets V

24-28 October 2005 — The Big Island, HI
Contact: Bo Reipurth (reipurth@ifa.hawaii.edu)
<http://www2.ifa.hawaii.edu/CSPF/ppv/ppv.html>

***Fourth Chandra Calibration Workshop**

31 Oct-1 Nov 2005—Cambridge, MA
Contact: Vinay Kashyap (ccw@head.cfa.harvard.edu)
<http://cxc.harvard.edu/ccw/>

***7th Pacific Rim Conference on Stellar Astrophysics**

1-5 November 2005—Seoul, Korea
Contact: Young Woon Kang (kangyw@sejong.ac.kr)
<http://arcsec.sejong.ac.kr/~web/pacific-rim/>

***Six Years of Science with Chandra**

2-4 November 2005—Cambridge, MA
Contact: Antonella Fruscione (afruscione@cfa.harvard.edu)

***IAU Symposium No. 232**

Scientific Requirements for Extremely Large Telescopes (ELTs)
14-18 Nov 2005 — Cape Town, South Africa
Contact: Michel Dennefeld (dennefel@iap.fr)
<http://www.sao.ac.za/IAUS232/>

***IHY/Basic Space Science Workshop**

20-23 November 2005 — United Arab Emirates University
Contact: Barbara Thompson (ihy_unbss_info@ihy.gsfc.nasa.gov)
<http://ihy.gsfc.nasa.gov/>

***16th Annual “October” Astrophysics Conference in Maryland: “Gamma-Ray Bursts in the Swift Era”**

29 Nov - 2 Dec 2005 — Washington, DC
Contact: Susan Lehr (october@astro.umd.edu)
<http://www.astro.umd.edu/october/>

***11th Latin-American Regional IAU Meeting (LARIM-2005)**

11-16 December 2005—Pucon, Chile
Contact: Monica Rubio (mrubio@das.uchile.cl)

***Astrochemistry - From Laboratory Studies to Astronomical Observations**

15-20 December — Honolulu, HI
Contact: Ralf I. Kaiser (kaiser@gold.chem.hawaii.edu)

***2006 Annual Meeting of the Canadian Astronomical Society/Societe Canadienne D’Astronomie (CASCA)**

1-4 June 2006 Calgary, Alberta
Contact: Rene Plume (plume@ism.ucalgary.ca)
<http://www.ism.ucalgary.ca/meetings/casca06>

Note: Listed are meetings or other events that have come to our attention (new or revised listings noted with an asterisk). Due to space limitations, and 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 crystal@aaas.org. Meetings that fall within 30 days of publication are not listed.

Don't forget the abstract deadline for the Minneapolis Meeting is Wednesday 23 March 2005 9pm EST!!



American Astronomical Society
2000 Florida Avenue, NW, Suite 400
Washington, DC 20009-1231

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WASHINGTON NEWS

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



As you read this column, the repercussions of the President's FY 2006 budget submission will be clear and the AAS will be embarked on a course of action to further astronomy and astrophysics. Right now however, as I write this column in late January, the only known is the unknown. We don't know how, or if the President will support the National Research Council's call for a manned servicing mission for the Hubble Space Telescope (a position reinforced by an AAS endorsement of the report: see <http://www.aas.org/governance/council/resolutions.html#HSTSERVICING>). We do not know if the President will focus only on the implementation of his vision for space exploration while leaving science goals on the sidelines. We do not know if the physical sciences at NSF will be supported at the levels called for by the Coalition for National Science Funding, a group that the AAS supports and is composed of science associations from all disciplines.

Living in a vacuum of information in January in Washington is indeed a frustration. But January is a good time to review how the

budget process works and when are the right times to interact with the policy process. Scientists often act when it is too late to have an impact. It is important to know how the federal budget is created and how to positively impact its development.

Let's look at the process in reverse time order. The President must sign all appropriations bills into law, which allows government agencies to actually spend taxpayer funds. Normally, appropriations bills (there are 13) are passed one-by-one, but lately have been passed in massive "omnibus" bills. Congress has been tardy in passing these bills, both the Omnibus bill and the appropriations bills in the recent past. Supposedly, they are to have the budget passed by the end of the federal fiscal year, which concludes at the end of September each year.

These omnibus bills rely on the work of the various appropriations subcommittees, which develop bills for subsets of the Federal government such as the bill that funds the Veterans Administration, the department of Housing and Urban Development and various independent agencies. The various subcommittees prepare reports and bills, which are used in tandem to fund the agencies and in a

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