

AAS NEWSLETTER

A Publication for the members of the American Astronomical Society

August 2004
Issue 121

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



Left: Arlo with Wykescha Young, who has served as Arlo's Administrative Secretary since 1999, holding awards presented at the AAS Members Meeting in Denver. Right: Arlo received a framed print of meeting covers from 1995-2004 at the AAS Banquet in Denver.

ARLO PASSES THE QUILL

An important milestone was passed at the Denver meeting with the ending of Arlo Landolt's unprecedented second nine-year stint as Secretary of the AAS. Arlo served 1980-1989 and again 1995-2004. The AAS thanks and salutes Arlo for a total of eighteen years incumbency in this extremely important office. The AAS also appreciates the support provided by Louisiana State University which hosted the Secretary's office for each of his nine-year terms.

Arlo is succeeded by John Graham of the Carnegie Institution's Department of Terrestrial Magnetism, Washington, DC.

ASTRONOMY EDUCATION: GADGETS AND GIZMOS

For the San Diego meeting, a room will be available for demonstrations of instructional technology in astronomy education. The facility will have power and high speed Internet at about twelve stations and will be open throughout the week to give everyone the opportunity for a hands-on experience. Suitable demonstrations would include interactive web tools (applets, immersive experiences, touch screens), instructional software, remote observing tools, audience response systems (or "clickers"), and wireless delivery of content to handheld devices or web phones. If you are interested in using this forum, or have question about the suitability of an idea or technology, please contact Chris Impey (cimpey@as.arizona.edu) by 15 September. If you want to be a presenter, send a brief statement of intent and description of your idea (one paragraph) to the same email address. Presenters will also be able to distribute printed materials or CD/DVDs. Only non-commercial, educational presentations are appropriate for this forum. The evaluation and selection of presenters will be carried out by the Astronomy Education Board.

2004 AAS ELECTIONS PRELIMINARY SLATE

AAS Executive Office Staff

Robert W. Milkey, Executive Officer
Kevin B. Marvel, Deputy Executive Officer
Diana T. Alexander, 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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The \$115.00 annual membership dues for the American Astronomical Society include \$3.00 that is applied toward a subscription to the *AAS Newsletter*. Periodical postage paid at Washington, DC.

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@aas.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@aas.org.

AAS member names appear in the *AAS Newsletter* in **boldface**.

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

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@aas.org

Journal Homepages/Manuscript

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

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

President	David J. Helfand J. Craig Wheeler
Vice-President	Robert D. Mathieu Paul A. Vanden Bout
Treasurer	Hervey Stockman
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Publications Board Chair	Michael F. A'Hearn Joel E. Tohline
USNC-IAU, Cat. I	Paul W. Hodge Patrick S. Osmer
Nominating Committee	Spiro K. Antiochos John Bally Edward M. Sion

Additional nominations for Officer or Councilor may be submitted by mail and must be accompanied by a written statement from the nominee indicating a willingness to serve and by the signatures of at least 30 voting Full Members of the Society. Additional nominations for the Nominating Committee must be proposed by at least 5 Full Members of the Society and must also be accompanied by the nominee's written statement indicating a willingness to serve.

All nominations and supporting materials must be received by **Wednesday, 15 September 2004** in the Office of the Secretary. Send nominations to: John A. Graham, Dept. of Terrestrial Magnetism, Carnegie Institution of Washington, 5241 Broad Branch Rd., NW, Washington, DC 20015.

MEMBER DEATHS NOTED

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

Walter G. Egan Thomas Gold Michael Ledlow Ben H. Moore

LETTERS TO THE EDITOR

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.

FROM THE AAS SECRETARY

John Graham, aassec@as.org

Actions Taken at the 204th Meeting of the Council of the American Astronomical Society, Denver, Colorado
30 May 2004

The Council:

1. Adopted the Minutes of the AAS Council's 203rd Meeting (Atlanta).
2. Approved the Executive Committee actions taken between January 4, 2004 and May 29, 2004.
3. Voted that Washington, D.C. be retained in the meeting cycle, meeting in Washington, D.C. every fourth year, and in particular meeting in 2014 at the Marriott Wardman Hotel.
4. Confirmed Tate & Tryon as the AAS Auditor for fiscal year 2004.
5. Approved the Financial Report for 2003.
6. Approved the Audit Report for 2003.
7. Adopted the 2005 Budget.
8. Accepted the Annual Report of the Investment Advisory Committee.
9. Voted to not create an Audit Committee.
10. Approved that funds be taken from the Special Projects Fund to support a Department Chairs' meeting.
11. Accepted the 2004 Election Results.
12. Accepted the election of the new members to the 2004 Nominating Committee.
13. Appointed Robert P. Kirshner, Catherine A. Pilachowski, Pierre Demarque, Chris D. Impey, Leonard V. Kuhl, John A. Graham, and Robert W. Milkey to the Executive Committee as described in Bylaws, Article VI. 2, for the interval between the annual business meetings, June, 2004 to June, 2005.
14. Approved the Bylaws changes, as published in the March 2004 AAS Newsletter. These changes involved Article VI.3.b., Article II.5, Article VI.4 and Article VI.5.
15. Accepted the Annual Reports from the AAS journals.
16. Approved the Annual Business Meeting agenda.
17. Adopted the Committee on Astronomy and Public Policy (CAPP) Annual Report.
18. Adopted the Annual Report from the Committee on Employment.
19. Adopted the Annual Reports from the AEB and the Education Office.
20. Accepted the Annual Reports from the AAS Divisions, Committees and Working Groups.
21. Accepted, in principle, a proposal by Carlson Chambliss to establish medal awards for a variety of accomplishments by students and others. Full details will be worked out between the donor and the AAS Officers.
22. Council authorized the Executive Committee to approve the Global Climate Change Statement, taking into account comments received during the Annual Members Meeting.
23. Council authorized the Executive Committee to make a policy statement regarding visas and International Traffic in Arms Regulations (ITAR).
24. Re-appointed Butler Burton, Katia M. Ferriere, Joseph C. Shields, and Susan M. Simkin to three-year terms as Scientific Editors of *The Astrophysical Journal*, effective 1 January 2005.
25. Elected Virginia Trimble to the Publications Board.
26. Adopted the recommendations of the Committee on Appointments regarding vacancies on the following: Committee on Employment, Investment Advisory Committee, Committee on the Status of Women in Astronomy (CSWA), Astronomy Education Board (AEB), International Commission on Illumination (CIE), Committee on Light Pollution, Radio Interference and Space Debris, Committee on the Status of Minorities in Astronomy (CSMA).
27. Accepted names provided by the Working Group on Professional-Amateur Collaboration (WGPAC) as its Steering Committee members.
28. Reviewed the salary of the Executive Officer.
29. Moved to adjourn.

MINNEAPOLIS TOPICAL SESSION PROPOSALS DEADLINE 15 NOVEMBER

The Summer meeting format provides for topical sessions to be held in Minneapolis on Tuesday, 31 May 2005 and Wednesday, 1 June 2005. Proposals are due in the Executive Office by 15 November 2004 and should be sent to Diana Alexander (diana@as.org.)

Sessions may be one half day, 3 ¼ hours or one full day, 6 ½ hours – there will be no more than three of these sessions running parallel at any time. Proposed sessions may consist of invited talks, selected contributed talks, selected display/poster papers, debates on a controversial subject, or any innovative format you may choose. Proposals should be concise, provide a rationale for evaluation, and be as specific as possible regarding topics, format, speakers, etc. Selected proposers (who must be AAS members) will be responsible for organizing their sessions, securing their speakers, and selecting contributed talks and posters if appropriate.

Information regarding topical sessions as well as other meeting sessions may be found on the AAS website under *Meetings*. There will be an on-line submission form available by 1 October 2004. Please contact Diana Alexander with any questions.

2005 MEMEBERSHIP DUES & SUBSCRIPTION RATES

Dues Rates

AAS Membership Rates

\$115	Full
\$115	Associate
\$40	Junior
\$58	Emeritus

Division Dues (Tentative)

Solar Physics Division

AAS Member: \$8, Division Affiliate: \$10

Division for Planetary Sciences

AAS Member: \$15, Division Affiliate: \$20

Division for Planetary Sciences Student (for first two years)

AAS Member: \$10, Division Affiliate: n/a

Division on Dynamical Astronomy

AAS Member: \$10, Division Affiliate: n/a

High Energy Astrophysics Division

AAS Member: \$8, Division Affiliate: \$10

Historical Astronomy Division

AAS Member: \$8, Division Affiliate: \$10

2005 Membership Subscriptions (Domestic)

For foreign shipping options, contact AAS Membership Department

<i>ApJ, ApJ Supplement</i>	\$50
Electronic Package	
<i>Astrophysical Journal (ApJ):</i> Paper only	\$275
Electronic Package and Paper <i>ApJ</i>	\$300
<i>ApJ Supplement (ApJS):</i> Paper only	\$55
<i>Astronomical Journal (AJ):</i> Paper only	\$105
Electronic Package and Paper <i>ApJ</i>	\$135
<i>Bulletin of the AAS (BAAS):</i> Paper only	\$30

Note: Members desiring paper and electronic access to more than one journal should subscribe to the "Electronic Package" with Paper option for one of the journals and the "Paper Only" option for the other(s).

2005 AAS PRIZE NOMINATION FORM

Please read the full descriptions of the AAS prizes and awards on www.aas.org or abbreviated information on page 13 of the 2004 AAS *Membership Directory*. All nominations are due by **1 October 2004** and should be sent to the Secretary of the AAS, John A. Graham
Dept. of Terrestrial Magnetism
Carnegie Institution of Washington
5241 Broad Branch Rd., NW, Washington, DC 20015

I wish to nominate (Name)

_____ of (Institution)

for the following prize (check one):

- | | |
|---|--|
| <input type="checkbox"/> Russell Lectureship | <input type="checkbox"/> Warner Prize |
| <input type="checkbox"/> Pierce Prize | <input type="checkbox"/> Education Prize |
| <input type="checkbox"/> Van Biesbroeck Prize | <input type="checkbox"/> Heineman Prize |
| <input type="checkbox"/> Weber Award | <input type="checkbox"/> Tinsley Prize |

Please note: send a letter with this form stating upon which major scientific achievements you base your belief that this person is a suitable candidate for the prize. Enclose a curriculum vitae of the nominee, bibliography and abstracts of three papers illustrative of the candidate's merit, and request that three supporting letters also be sent to the Secretary.

Print Your Name _____

Signature _____

Phone Number _____

Email _____

PRESIDENT'S SUB-COMMITTEE ON CLIMATE CHANGE STATEMENT REPORT

Comments were solicited from the AAS membership in the months leading up to the June 2004 Society meeting regarding Council's draft endorsement of the American Geophysical Union's "Human Impacts on Climate" resolution. A total of 54 comments were received, of which 28 were judged to be positive, 10 ambiguous or neutral, and 16 negative. Council considered all comments and wording of the AAS endorsement was altered based on membership input. This is a summary of the positive and negative comments plus Council's responses to the negative comments, followed by the final wording of the AAS endorsement of the AGU resolution approved at the members meeting on 2 June 2004.

A. Positive comments summary:

Members who responded positively to the endorsement were pleased the AAS is taking action on such an important issue, and were glad that the AAS is not making its own statement, but supporting the AGU. Some felt the statement was not strong enough and others suggested minor changes and corrections. Several members wrote long commentaries on their own readings of the climate change research. A few supportive members commented that they are actually teaching about climate change (certainly a strong motivator for learning the literature).

B. Criticisms of AGU statement endorsement, and responses:

1) The AAS has no business making any statement outside of astronomy.

The AAS by-laws provide for Council resolutions on matters of public policy. A number of such resolutions have been issued in the past, posted at: <http://www.aas.org/governance/council/resolutions.html>.

It is also appropriate for the AAS to support an understanding that scientific research should inform public policy. That is the specific intent of the

AGU statement and the AAS endorsement.

2) This resolution does not represent my views at all.

Unanimity of the membership is not required or expected in regards to Council resolutions, but diverse views assisted us in considering the endorsement and improving it.

3) If this resolution is issued I will drop my membership.

We very much regret that any member would leave the Society over a resolution arrived at through due process.

4) Astronomers don't know much about climate and global warming and we should not comment outside our fields of expertise.

The AAS includes many planetary scientists and others who study the Sun-Earth connection. The basic scientific matter is the energy budget of the Earth regarding which astronomers can have informed opinions. We are qualified to comment on the application of the scientific method to questions in physical science. We are also qualified to stand behind advocating scientific research as an important facet of policy making.

5) The AAS should not enter into political arguments or politicize science.

Council views an endorsement of the AGU's statement on global warming as working against, rather than for, politicization of science. The intent is to uphold the process of peer-reviewed research and the existence of scientific consensus about global warming.

6) No statement should be made until more is known about the subject with more certainty. There are good scientists publishing peer-reviewed papers who strongly disagree with the central points of the AGU statement.

As scientists we understand that scientific consensus emerges without unanimity. As scientists we also understand that a consensus can be wrong, but it is nevertheless proper procedure to acknowledge a consensus when one exists. The AGU statement represents a strong scientific consensus within that expert community. The AGU and the AAS both recommend that more research be focused on less certain points and open questions. It is also true that policies will be crafted before the relevant research is "complete," and we believe that policies should be based on peer-reviewed research.

7) The AAS resolution does not back up its claim with evidence.

The AAS resolution points to the AGU resolution that is quite lengthy and summarizes and/or refers to evidence.

8) There is no evidence of global warming /if there is evidence of global warming there is no evidence that it is due to other than natural climate variation or solar variation/if there is evidence of recent unusual variation there is no evidence that human agency is significant.

The scientific consensus of the expert AGU community's peer-reviewed research is that there is clear evidence of global warming, that warming since the later parts of the 20th century represents more than natural climate and solar variation, and that human agency is a significant cause of the warming.

9) The AAS should not recommend what kinds of science should be funded in other disciplines. Would the AAS or AAS members be willing to have astronomy funding reduced in order to have more research on global warming?

The AAS is not making recommendations for funding specific research areas in other disciplines, but simply agreeing with

continued on page 7

2003 AAS FISCAL REPORT

The firm of Tate & Tryon audited the accounts of the Society for the year ending 31 December 2003. This audit was conducted in accordance with generally accepted auditing standards, and indicated no material problems while confirming that the AAS was in compliance with the required accounting provisions. This report was submitted to and accepted by the Council at its meeting on 30 May 2004. This was the first year Tate & Tryon served as AAS's auditors and this accounts for slight differences in the presentation of some of the tabular data between this year and last.

The Society reports its finances in six categories (see Table I) according to the nature of the activities and the source of the revenues:

(1) General Programs: This includes the Society's general operations and administration. In addition, the General Fund covers the income and expenses of all Society programs including educational and public policy activities, and meetings. Also under this heading are the general publications handled by the Executive Office, including the *AAS Newsletter*, the *AAS Job Register*, and the *AAS Membership Directory*.

(2) Journals: Each of the journals published by the AAS is operated as a distinct cost center. AAS bylaws, Article VIII.3, mandate that each Journal maintain a reserve fund equal or above the level of one-half of the annual operating expenses. At the end of 2003 each of the AAS journals had reserve funds totaling \$5,091,116, or 74% of the overall operating costs of the journals.

At the close of 2003 the reserve fund for long-term maintenance of the journal electronic archives had reached a balance of \$266,575, including the annual contribution of \$40,000 from the journal operations. To date, nothing has been withdrawn from this fund.

(3) Divisions: These comprise the finances of the five AAS Divisions and their related prizes. The Divisions legally fall under the oversight and fiscal responsibility of the AAS Council, but each Divisional Committee makes the financial decisions of its Division and the fiscal details are reported directly to the members of the Division. The figures in Table I include all Division funds whether held by the Division Treasurers or in the Society's general accounts.

(4) Bequests and Memorials: These include the AAS prizes and other funds established by gifts and bequests to the Society. The timing of the actual awarding of the various prizes causes the fluctuations in expenses between successive fiscal years. The balances of the principal funds on 31 December 2003 were:

Russell Lectureship	\$182,926
Warner Prize	\$ 51,555
Pierce Prize	\$112,771
Tinsley Prize	\$ 57,114
Van Biesbroeck Prize	\$ 56,919
Weber Award	\$103,322
Education Prize*	\$115,153

* Including Wentzel endowment.

(5) Grants and Contracts: The bulk of this category is in Federal Grants

NASA Electronic Publishing Grant (ended 2003),
NASA supported AAS Small Research Grants,
NASA supported travel to the IAU General Assembly
NSF International Travel Grants,
NSF funding for the Bok and Lines Awards

(6) Other: This includes the General Operating Reserve and accounts for the Shapley Visiting Lecturer Program, and a variety of other special purpose funds. Despite the good earnings the General Operating Reserve shrank by \$13,439 to \$1,154,288 as a result of the disappointing attendance at the Nashville meeting. The fund balance for the Shapley Lecture Program was \$565,727 as of 31 December 2003.

Summary

The overall financial picture for the Society remains very good. Net assets increased by \$870,400, including an unrealized gain of \$388,349 in the market value of securities in which the reserve funds are invested.

Table I gives a comparative summary of activities and change of net assets of the AAS for 2002 and 2003.

Table II contains a summary of the AAS Balance Sheet as of 31 December 2002 and 31 December 2003.

Table I. Statement of Income and Expense for 2002 and 2003

	2002	2003
Unrestricted Net Assets		
Revenue		
General programs	1,387,016	1,303,425
Journals	6,672,668	7,494,377
Divisions	193,067	348,491
Bequests and Memorials	20,000	20,000
Grants and Contracts	246,110	458,589
Other	46,686	169,573
Released from restrictions	47,422	55,304
Total revenue	8,612,969	9,849,759
Expenses		
General Programs	1,814,096	1,476,892
Journals	6,374,325	6,874,588
Divisions	265,477	288,302
Bequests and Memorials	41,220	42,378
Grants and Contracts	246,224	500,982
Other	32,296	34,555
Total expenses	8,773,638	9,217,697
Change in Unrestricted Net Assets	(160,669)	632,062
Change in Restricted Net Assets	45,777	238,338
Change in total net assets	(114,892)	870,400
Net assets,		
Beginning of year	8,010,050	7,895,158
End of year	7,895,158	8,765,558

Table II. Balance Sheet for 31 December 2002/2003

	2002	2003
Total Assets	\$ 10,533,183	\$ 10,717,315
Current Assets	2,869,117	2,663,901
Fixed Assets	81,439	62,600
Other Assets	7,582,627	7,990,814
Total Liabilities	\$ 2,638,025	1,951,757
Current Liabilities	\$ 507,163	710,800
Deferred Revenue	2,130,862	1,240,957
Net Assets	\$ 7,895,158	8,765,558
Unrestricted	6,283,664	6,915,726
Temporarily restricted	1,153,412	1,458,508
Permanently restricted	458,082	391,324
Liabilities & Net Assets	\$10,533,183	10,717,315

Climate Change continued from page 5

our sister society, the AGU, that further climate-related research could help inform the decisions of policy makers, as well as develop strategies to mitigate the adverse effects of global climate change.

10) We are putting ourselves in political danger by issuing this resolution.

This is possible but unlikely. The members of Council and many of the AAS membership believe there are greater dangers in not addressing global warming in this public manner.

Final Text of AAS Endorsement of AGU Statement on Climate Change

The American Geophysical Union (AGU) notes that human impacts on the climate system include increasing concentrations of greenhouse gases in the atmosphere, which is significantly contributing to the warming of the global climate. The climate system is complex, however, making it difficult to predict detailed outcomes of human-induced change: there is as yet no definitive theory for translating greenhouse gas emissions into forecasts of regional weather, hydrology, or response of the biosphere. As the AGU points out, our ability to predict global climate change, and to forecast its regional impacts, depends directly on improved models and observations.

The American Astronomical Society (AAS) joins the AGU in calling for peer-reviewed climate research to inform climate-related policy decisions, and, as well, to provide a basis for mitigating the harmful effects of global change and to help communities adapt and become resilient to extreme climatic events.

In endorsing the "Human Impacts on Climate" statement, the AAS recognizes the collective expertise of the AGU in scientific subfields central to assessing and understanding global change, and acknowledges the strength of agreement among our AGU colleagues that the global climate is changing and human activities are contributing to that change.

Committee members: Tom Ayres, Dana Backman, Carol Christian

DIVISION NEWS

HISTORICAL ASTRONOMY

Thomas R. Williams, Chair

History Celebrations in San Diego

The AAS-Historical Astronomy Division (HAD) will celebrate two anniversaries at its meeting in San Diego (9-10 January 2005). The meeting will mark the centennial of the founding of the Mount Wilson Observatory and the twenty-fifth anniversary of the founding of HAD. A special session on Sunday afternoon, 9 January 2005, will feature both events.

Although George Ellery Hale had been observing with temporary facilities on Mount Wilson since 1903, it was not until 20 December 1904 that the trustees of the Carnegie Institution of Washington (CIW) formally agreed to found the Mount Wilson Solar Observatory. Hale soon replaced the temporary structures on the mountain top with more permanent installations and constructed a headquarters building in Pasadena that still serves as home for astronomers employed at the Palomar and Las Campanas Observatories of the CIW. A session of invited papers will discuss the noteworthy astronomers of the Mount Wilson era, institutional relations with other observatories, and the light pollution problem that eventually reduced the utility of Mount Wilson for astronomical research.

At the AAS meeting in Mexico City in 1979, Jack Eddy, Ken Brecher and Owen Gingerich informally discussed the need for a separate focal point within the AAS for the discussion of the use of historical astronomical data for research and teaching, and the emerging field of archaeoastronomy as well as straight-forward historical research topics. Inspired by the strength of their mutual convictions in this area, they agreed to discuss their idea with colleagues. Finding support for the concept, they drafted a set of by laws and received approval of the AAS Council to form a new Historical Astronomy Division. The San Diego meeting marks the twenty-fifth anniversary of the first meeting of

the Division. Owen Gingerich will reminisce about progress of the division in a formal talk that it is hoped will stimulate similar responses from other long-standing members of the division. An ice-cream reception will follow the formal meeting. All former officers and committee members have been invited to participate.

AAS Obituaries

Unlike many professional societies, the AAS publishes obituaries for all its members. In the annual, end-of-the-year issue of the *Bulletin of the American Astronomical Society (BAAS)*, you will find short obituaries for AAS members that have recently passed away. Most are authored by scientific colleagues who knew them well. In these mini-biographies, the authors are requested to include personal information for the deceased as well as summaries of their professional achievements. In so doing, the AAS preserves a biographical legacy for historians, a tribute for appreciative friends and family members and an acknowledgement of significant achievements in the field of astronomy.

Since 1991, the annual set of AAS obituaries has been prepared by the HAD. For the past few years, the number of annual obituaries has been about 25 with an average length of about 1000 words. Whenever possible, the biographical sketch is accompanied by a portrait image. In 2003, the 22 obituaries included those for some of the giants in our field including former Mount Wilson and Palomar Observatory Director Horace Babcock (1912-2003), distinguished astrophysicist and Caltech administrator Jesse Greenstein (1909-2002), radio astronomy pioneer Grote Reber (1911-2002), and a driving force in experimental cosmology, David Wilkinson (1935-2002).

Besides recording the details of astronomer's lives, these obituary tributes make for interesting reading. Do you know which astronomer left primitive conditions in the California gold fields and went straight to the University of California at Berkeley without finishing high school? Who wrote a paper on adaptive optics as

early as 1953 and who published a major mathematical treatise on the ancient planetary systems at the age of 98? These answers, and much more, are all in the 2003 obituary edition of the *BAAS*.

Don Yeomans
Editor, AAS Obituaries and Chair-Elect,
HAD

PLANETARY SCIENCES

William D. Cochran, Chair

2004 DPS Prizes

Congratulations to the recipients of the 2004 DPS prizes! These awards will be formally presented at the Louisville meeting in November 2004.

Jean-Luc Margot - 2004 Harold C. Urey Prize recipient, in recognition for his work in observational astronomy, which has advanced our understanding of binary asteroids and the spin states of the terrestrial planets.

Carle M. Pieters - 2004 Gerard P. Kuiper Prize recipient, recognized for being a pioneer and principal driving force in the field of planetary remote sensing.

Alexander T. Basilevsky - 2004 Harold Masursky Award recipient, in recognition of substantial service contributions to the planetary science communities of Russia, the United States, and Western Europe throughout his long career.

David Morrison - 2004 Carl Sagan Medal recipient, recognized for his outstanding communication about planetary science to the general public in his writing, slide collections, and public speaking.

36th DPS Meeting

The 36th meeting of the Division for Planetary Sciences will be held in Louisville, KY from 8-12 November 2004. Special events will include a reception at the Louisville Slugger Museum on Sunday, 7 November, and a banquet at Churchill Downs. The abstract deadline is 1 September, and discounted registration rates are available until 17 September. Further information is available at the meeting website, <http://dps04.org>.

SOLAR PHYSICS

Ed DeLuca, Chair

2004 AAS/SPD Meeting

Over eleven solar physics press releases were issued during the 2004 AAS/SPD meeting. The National Solar Observatory discussed the selection of three sites possible sites for the world's largest solar telescope Advanced Technology Solar Telescope (ATST). The atmospheric conditions at Haleakala, Hawaii; Big Bear Lake, California; and La Palma, Canary Islands, Spain will be studied in more detail during the coming year. The design of the ATST has been refined to simplify the telescopes interface with the coude instruments, and to increase air flow through the structure. For the first time a flare was observed deep in the solar atmosphere using a new infrared camera on the Dunn Solar Telescope. A combination of state-of-the-art image enhancement techniques (adaptive optics, frame selection, and speckle masking) were used to show a shearing flow within a sunspot for the first time. The Diffraction-Limited Spectropolarimeter first results measure magnetic fields with 0.2" (600km) spatial resolution. A new high-order adaptive optics system has been installed on the Dunn Solar Telescope, providing images with 0.2" (600km) spatial resolution.

Observing the magnetic field in the corona is a particular challenge. Scientists at the IfA (Univ. Hawaii) have measured the line of sight magnetic field in the corona in the infrared. Scientists at HAO (UCAR) have imaged the structure and strength of magnetic fields using a multi-channel polarimeter.

The Sun's magnetic cycle is not strictly periodic, predicting the onset of the next cycle is an important step toward understanding the cycle that controls space weather. Scientists at HAO have developed a detailed model of the solar dynamo, that allows for the first time a prediction based on physical processes observed in the sun. The answer is - the cycle will begin between 2007-2008 (the rise to the next maximum begins).

One of the most difficult problems in space weather is the prediction of Solar Energetic Particles. These relatively rare events travel from the Sun to Earth in about an hour, giving astronauts and spacecraft operators little time to prepare. The site of the particle acceleration has been predicted by a theoretical model and the location confirmed by observations by SOHO/UVCS.

Scientists at Lockheed-Martin and the University of Oslo have measured the photospheric magnetic field down to 0.03" (100km) spatial resolution. Previously observed flux tubes appear to have substructure at this resolution.

No press conferences were held at the AAS/SPD meeting about the giant flares of October/November 2003, because of the successful press activity, organized by Nat Gopalswamy, two weeks earlier at the AGU Joint Assembly meeting.

<http://www.nso.edu/press/>
<http://www.ifa.hawaii.edu/info/press-releases/>
<http://www.ucar.edu/news/releases/2004/>
<http://www.lmsal.com/Press/SPD2004/>
<http://www.cfa.harvard.edu/press/pr0420.html>

2004 Hale Prize

The 2004 Hale Prize was awarded to **Prof. Robert Lin** for his pioneering experimental work on the detection of high energy solar radiation and particles, for his many discoveries in the field of high energy solar and heliospheric physics and for his generous and untiring leadership of, and support for, research programs and projects in this field.

The 2004 Karen L. Harvey prize was awarded to **Harry Warren** for his major contributions toward characterizing and understanding the morphology of coronal plasmas, the evolution of solar flares, and the variability of the Sun's extreme ultraviolet irradiance.

Judith Lean gave a comprehensive overview of the Sun's influence on the Earth's astronomical neighborhood to a packed house. The talk covered influences on time-scales of hours to decades to centuries. The talk is particularly relevant in light of the recent discussions of the climate change policy statement.



Leonard Strachan discusses the solar sources of interplanetary hazards.



Tom Berger discusses new observations of the smallest visible magnetic fields.



Tom Berger discusses new observations of the smallest visible magnetic fields, while Steve Tomczyk, Masumi Dikpati, Leonard Strachan and Jun Lin look on.



Harvey Prize winner Harry Warren explains his results on flare emission processes to NASA GSFC John C. Lindsay prize winner Brian Dennis.

Photos taken by John Leibacher

EMPLOYMENT COMMITTEE

Working as a Public Interest Scientist

Laura Grego

“Great talk, but why did you put your conclusions at the end?” a slightly mystified colleague asked me after my first talk in my new job. This, along with the ubiquity of business cards, was one of the first signs that my socialization as a research scientist might not have entirely prepared me for my new milieu: the world of public policy. Policymakers often have to make decisions quickly and so like to know the bottom line right away; then if they’re interested, they’ll pay attention to the details and justifications. Scientists tend to pose the question, outline the assumptions and method of inquiry, and *then* make a conclusion—otherwise we fear it may look suspiciously like we prejudiced the experiment.

My new career is in public interest science, in particular, the field of technical security analysis. Public interest scientists work to make sure that policy decisions are made on a sound scientific basis. Much of my work is an extension of what many of you probably do on a daily, “civilian” basis when you read the paper and wonder, “How could missile defense possibly work? Would a nuclear bunker buster really be useful?” People in my field perform scientific analysis of pressing issues like the impending weaponization of space, nuclear terrorism, and new nuclear weapons development. Much of this analysis relies on physics no more complicated than what one learns as an undergraduate physics major. But nearly always, it draws on skills more peculiar to scientific *researchers*—looking at a complicated problem and winnowing it down to the essential questions, quickly learning the basic elements of a new field (synthetic aperture radar? ballistic missile trajectories? “minisatellites?”), and back-of-the-envelope calculations.

I work at a nonprofit organization, Union of Concerned Scientists, and part of our mandate is to provide solutions and effect change, so the other part of my work is advocacy: writing articles, speaking to the press, meeting with policymakers, drafting suggested legislation. Good communication skills are extremely important, particularly the ability to explain a technical subject to nonscientists. In my first year, I spoke on space weapons issues to groups as disparate as undergraduate physics majors, career diplomats, defense industry engineers, and military officers.

STATUS OF WOMEN IN ASTRONOMY

Patricia Knezek (CSWA Chair, WIYN Observatory, knezek@noao.edu)

Delay in Publication of June 2004 *STATUS*

Many of you may have noticed that the June 2004 issue of *STATUS* was not ready for distribution during the June AAS meeting, as it usually is. The editors apologize for the delay, switching editorial staff resulted in a few hiccups. We think we have it down now! However, you should have received your issue by the time you read this *AAS Newsletter*. If you currently do not receive a paper copy of *STATUS* but would like to do so, please email Dennis Renner, renner@aaas.org. Otherwise, you can access issues of *STATUS* on the web from the CSWA website. See <http://www.aas.org/~cswa/pubs.html>.

Report on CSWA Draft of Recommendations from WIA II Meeting

As I write this, the CSWA is completing its first draft of the Pasadena Recommendations that follow largely from the Women in Astronomy II Meeting (WIA II) held 27-28 June 2003. We have added a preamble to the recommendations themselves to place the document in context. After considerable discussion, we have focused on five areas: (1) Tenure-Track Hiring, (2) Career Advancement and Recognition, (3) Institutional Policies, (4) Varied Career Paths, (5) Cultural Issues, and (6) Statistical Information. We are on track to present the recommendations to the AAS Council at the January 2005 AAS meeting.

As the next step of this process, we are soliciting comments and suggestions from the AAS community at large. The draft is available for viewing, comments, and suggestions, through the “Members Only” AAS web pages, and will remain open to comment through September 15. We will then incorporate the comments and suggestions from AAS members for the presentation to the AAS Council in January. As noted in the last *AAS Newsletter*, we anticipate that this set of recommendations will be only the first, and as the astronomy workforce continues to evolve, other recommendations will be required.

Activities at the June AAS Meeting in Denver

The CSWA had a busy AAS meeting in Denver this June. First of all, as reported above, the CSWA met to continue its work on the Recommendations that follow from the Women in

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EDUCATION OFFICER

George D. Nelson
george.nelson@wwu.edu

I want to personally and on behalf of the Society thank Andrew Fraknoi, George Greenstein, and Randy Phelps who are transitioning off the Astronomy Education Board (AEB), for their terms of service. They made valuable contributions to astronomy education through the AEB and continue to contribute in many other ways. Andy and George each served for two terms and helped guide the Society's education goals and transition to a formal committee for education. New AEB members are Edna DeVore, Stacey Palen, and Jacob Noel-Storr. We welcome them to the AEB and invite you to add them to your contact list. As always, we welcome your inputs and comments

Have you attended one of the Astronomy 101: A Continuing Dialog sessions on the Sunday prior to the start of an AAS meeting? If so, thank you! These sessions, started by my predecessor Bruce Partridge, have become valuable sources of information, discussion and contacts for many of us. If you haven't yet attended a session, I invite you to come to the San Diego Meeting in January 2005 a little early and participate. Probably the most common characteristic shared by astronomers is that we are responsible for teaching Astronomy 101. I'm sure that you all have something to contribute and something to learn. If you can't make the session on Sunday, be sure to check out *Gadgets and Gizmos*, (see page 1 for a description), near the exhibit area that vice-president and AEB member Chris Impey has helped organize. This is an opportunity for those who are using technologies and tools in innovative ways to share what they are up to with us. And if you have something "cool" to share, please sign up.

EDUCATION OFFICE

Susana E. Deustua, Director, Educational Activities, deustua@as.org

Workshop for New Faculty in Physics and Astronomy

Department chairs are invited to nominate new members of their faculty to attend the ninth annual New Faculty Workshop, 4-7 November 2004, at the American Center for Physics in College Park, MD, sponsored by the American Association of Physics Teachers, the American Physical Society, and the American Astronomical Society and funded by the National Science Foundation.

Letters of nomination should be received at the AAPT office by 24 September 2004 to receive primary consideration, and may be emailed to Ken Krane (kranek@physics.orst.edu) or to Maria Elena Khoury (mkhoury@aapt.org). Letters should indicate nominee's date of initial tenure-track appointment and primary teaching duties, along with a statement of department willingness to support the cost of travel to the workshop site. A detailed schedule will be available in the early fall. Information is available at <http://www.aapt.org/Events/newfaculty.cfm> or the AAS Education Office.

2004 Intel International Science & Engineering Fair

Terry D. Oswalt

A judging team consisting of Dr. Terry Oswalt of the Florida Institute of Technology, Dr. Beverly Lynds formerly of the Kitt Peak National Observatory (retired), and Dr. Michael Faison of Reed College awarded the 2004 American Astronomical Society-Astronomical Society of the Pacific Priscilla and Bart Bok Awards and the International Amateur-Professional Photoelectric Photometry Richard D. Lines Award at the 55th annual Intel International Science and Engineering Fair (ISEF), held in Portland, OR, during the week of 9-15 May 2004.

Eric M. Sauder, a junior at Hempfield High School in Landisville, Pennsylvania, won the Bok First Place Award and a \$5000 scholarship for his project "The Relationship Between Sunspots and Solar Flares." Sauder investigated the relationship between sunspot number and solar flares. His project involved the construction of a 3-meter radio telescope sensitive to frequencies between 3.7-4.2 GHz. He compared the flare outburst data collected by his small radio telescope with NOAA satellite observations of solar flares. Sauder's teacher/sponsor was Amy J. Thompson.

Julie Ann Krugler, a senior at Grosse Point North High School in Grosse Point, Michigan, won the Bok Second Place Award and a \$3000 scholarship for her project "In Pursuit of Population III." Using spectroscopic data collected at Kitt Peak National Observatory Krugler performed an abundance analysis of 20 G and K stars to determine whether any had low enough metallicity to be considered Population III candidates. Krugler's teacher/sponsor was Ardis Maciolek.

A team of three freshmen, Mary Masterman, Mimi Thuy Nguyen and Sarah Louise Howell, from the Classen School of Advanced Studies in Oklahoma City, OK, won the Richard D. Lines Award in Astronomy for their project "Investigating Stars and Nebulae Through the Construction and Operation of an Astronomical Spectrograph." Using a digital camera, small telescope, and assorted home-made optics, the team constructed a working astronomical spectrograph and used it to classify stellar spectra and estimate their temperatures. The team's teacher/sponsor was Karyn Hester.

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NEWS FROM NATIONAL SCIENCE FOUNDATION

Eileen D. Friel, Executive Officer, Division of Astronomical Sciences, efriel@nsf.gov

New Faces at AST

The Division welcomes **Dr. Michael Briley** as the new program director for Stellar Astronomy and Astrophysics starting this fall. Mike comes to AST on a one-year visiting position from University of Wisconsin, Oshkosh where he has been a professor for 10 years and now holds the F. John Barlow Endowed Professorship. Mike's research centers on the composition and histories of stars in the Galactic halo, with particular attention to light element abundances in globular cluster stars. He has also been active in involving undergraduates in his research and offering outreach programs for teachers, students and the general public. Mike's broad experience in stellar astrophysics, astronomy education, and activities in the community will make an important contribution to the Division.

2002 NSF PECASE Award

NSF is pleased to announce that **Dr. Ian Dell'Antonio**, of Brown University, has been named as the recipient of the 2002 Presidential Early Career Award for Scientists and Engineers for his work "Measuring Cosmology and the Evolution of Structure via Gravitational Lensing".

2004 NSF CAREER Awards

The Division of Astronomical Sciences at the National Science Foundation has announced their Faculty Early Career Development (CAREER) awards for FY2004. This NSF-wide program recognizes and supports the early career development activities of those teacher-scholars who are most likely to become the academic leaders of the 21st century. CAREER awardees are selected on the basis of creative career development plans that effectively integrate research and education within the context of the mission of their institution. As of press time, six awards had been made. (AAS member names in bold.)

- Robert Caldwell, Dartmouth University, "The Physics of the Universe: Cosmology, Fields, Gravitation, and Scientific Literacy"
- **Laird Close**, University of Arizona, "Direct Detection of Extrasolar Planets With Very High Contrast Adaptive Optics Imaging"
- **Daniel Dale**, University of Wyoming, "WySCH: The Wyoming Survey for Cosmological H-alpha"

- **Vicki Sarajedini**, University of Florida, "Surveys for Faint Active Galactic Nuclei"
- **Keivan Stassun**, Vanderbilt University, "Order-of-Magnitude Problems in Star Formation and Minority Representation"
- **Nicole Vogt**, New Mexico State University, "The Formation and Evolution of Disk Galaxies"

New REU Program Solicitation

NSF has announced a new program solicitation for the Research Experiences for Undergraduates (REU) Program (NSF 04-584; available at <http://www.nsf.gov/pubs/2004/nsf04584/nsf04584.htm>). The new program announcement establishes a new annual deadline of **17 August** for new or renewal proposals for REU Sites. Requests for REU supplements can be submitted at any time, through we encourage submissions early in the fiscal year.

Upcoming Committee of Visitors

Every three years each program at NSF undergoes an examination by an external Committee of Visitors, and that time is rapidly approaching for all programs in AST. We plan to convene our Committee of Visitors in the spring of 2005. The Committee spends several days at NSF examining proposals, reviews, documentation of the review process and the decisions made by program officers. We spend time talking with them about program balance, plans for the future, challenges that we face and many other issues that we or they (as representatives of the community) think are important. Formed as a sub-committee of the MPS Advisory Committee, their report is presented to, and accepted by, the Advisory Committee and becomes public (see <http://www.aas.org/policy/NSFVisitorReport.html> for a copy of the last report). As the introduction to the report on the AAS web page says, "The end result is, we hope, mutual understanding, support, and a stronger program for U.S. astronomy."

We will soon begin contacting members of the community to undertake this essential function. We urge you to consider spending the time to help us and our community. Although it represents a considerable investment of effort on the part of NSF staff and the Committee, we think it fair to say that both have found it a rewarding and enlightening experience.

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HONORED ELSEWHERE

ASP 2004 Award Recipients

David Charbonneau, a Millikan Postdoctoral Scholar in Astronomy at the California Institute of Technology in Pasadena, CA, has been selected to receive the 2004 Robert J. Trumpler Award. Each year the Society's Board of Directors chooses a recent recipient of the Ph.D. degree to receive the Trumpler Award, which is given in recognition of the young scientist's unusually important work to astronomy.

John Lacy, Professor of Astronomy at the University of Texas at Austin, is the recipient of the Society's Maria and Eric Muhlmann Award for 2004. The Muhlmann Award is given annually for recent significant observational results made possible by innovative advances in astronomical instrumentation, software, or observational infrastructure.

Matt Gardner, Angelo Parisi, and Terry Dye, members of northern California's "Big Bang Band," are recipients of the Society's Las Cumbres Award for 2004. The Award is given to an individual or group in recognition of outstanding educational outreach by an amateur astronomer(s) to grade K-12 children and/or the interested lay public.

The ASP's annual awards permit it to recognize significant contributions to astronomy by professional and amateur astronomers and by educators at all levels.

Schreier to Become President of Associated Universities, Inc.

The Board of Trustees of Associated Universities, Inc. (AUI) announces the appointment of **Dr. Ethan J. Schreier** as the next President of AUI. Schreier will assume this position in October 2004.

Schreier is currently Executive Vice President of AUI, and has been with AUI since November 2001 while on leave from the Space Telescope Science Institute in Baltimore and is an Adjunct Professor in the Department of Physics and Astronomy of Johns Hopkins University.

A tenured astronomer at STScI, Schreier helped establish the Institute in 1981 and had overall Institute responsibility for operations, observation support, computing, data management and archiving activities for the Hubble Space Telescope. He held the positions of Chief Data and Operations Scientist, Associate Director for Operations, Associate Director for the Next Generation Space Telescope, and head of Strategic Planning and Development.

Alcock Named Director of Harvard-Smithsonian CfA

The Smithsonian Institution and Harvard University jointly announced the appointment of **Dr. Charles R. Alcock** as director of the Harvard-Smithsonian Center for Astrophysics, effective 1 August 2004. As the new CfA Director, Alcock will manage a staff of more than 900 employees (including more than 300 scientists) and an annual budget of about \$110 million.

He will hold several titles: Director of the Harvard-Smithsonian Center for Astrophysics, Director of the Smithsonian Astrophysical Observatory, Director of the Harvard College Observatory, and Professor of Astronomy at Harvard University.

In 2001, Alcock was elected to the National Academy of Sciences, one of the highest honors that can be accorded a scientist. He received the 2000 Beatrice M. Tinsley Prize from the AAS and the 1996 E.O. Lawrence Award in physics. Both awards recognized his pioneering work as principal investigator on the major U.S. project to search for massive compact halo objects and estimate their contribution to the dark matter component of the Milky Way's halo.

Astronomer Royal Wins Top Science Communication Prize

Sir Martin Rees, the UK's Astronomer Royal, has been awarded the Royal Society Michael Faraday Prize for 2004. Rees, famous for many years for popularising the complex ideas of astrophysics and astronomy, was chosen because of the combination of his worldwide reputation as a balanced and accurate commentator on science and a career-long commitment to communicating it to a wide public through books, lectures and the media.

Rees will be receiving his prize and delivering his lecture on 27 January 2005. In the lecture, he will be examining the issues and challenges he has faced during his years of communicating and debating many aspects of science.

The Royal Society Michael Faraday Prize is awarded annually for excellence in communicating science. The award, established in 1986, is given annually to the scientist or engineer whose expertise in communicating scientific ideas in lay terms is exemplary.

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204th AAS MEETING 29 MAY - 3 JUNE IN DENVER

Registration reached 1330 as astronomers and friends convened in Denver for the 204th AAS meeting, held jointly with the Solar Physics Division. Besides recent findings in Solar Physics (see page 9), the meeting featured numerous early science results from the Spitzer Space Telescope (hereafter, "Spitzer"), inferences about the first stars and active galactic nuclei, and a major address by NASA Administrator Sean O'Keefe (see page 20). Photos of prize winners at the meeting will appear in the October AAS *Newsletter*. All pictures are AAS photographs by Richard Dreiser, © 2004 American Astronomical Society.



L-to-R: Michael Werner (Jet Propulsion Lab.) described Spitzer's on-orbit performance and, with Nitya Kallivayalil (U. Pennsylvania) he investigated the "MACHO" star in a microlensing event; David Turner (center, St. Mary's U., Halifax) analyzed the pulsations of Polaris, and Edward Guinan and Scott Engle (both Villanova U.) found that the star has brightened by a magnitude since antiquity.



Investigators presenting news from the GOODS survey with Spitzer, Chandra, and Hubble were, l-to-r, Mark Dickinson (National Optical Astronomy Obs.), Anton Koekemoer (Space Telescope Science Inst.), Haojing Yan (Spitzer Science Ctr.) and Megan Urry (Yale U.).



Radio astronomer Farhad Yusuf-Zadeh (Northwestern U.) and infrared expert Jocelyn Keene (Jet Propulsion Lab.) spoke at a press conference on "Mysterious Media in the Hearts of Galaxies."



Richard Ellis (Caltech) discussed the sources that may have ended the "Dark Ages" in the early universe.



David Meisel (SUNY Geneseo) was all smiles while reporting on Arecibo radar observations of hypervelocity meteors.



Mark Whittle's ears may still be ringing from his educationally oriented presentation on the Big Bang sound. See and hear his website at the U. Virginia.



Jessica Bartley (Boulder High School) studied theoretical maximum principal quantum numbers for hydrogen-like atoms in the extended atmosphere of Betelgeuse.



Nathan Hawkins (left) and Ronald Samec (both, Bob Jones U.) reported on interacting binary stars.



Nathan Smith (U. Colorado) penetrated the "purple haze of Eta Carinae."



Philip Kaaret (Harvard-Smithsonian Center for Astrophysics, "Cfa") and Jonathan Keohane (Spitzer Science Ctr.) held a "Black Hole Briefing" for journalists.



Undergraduates attending the meeting included l-to-r (standing) Anuradha Bhatia (Denver U.), Stephanie Jalovec (U. Colorado), and (sitting) Rachel Matson (Denver U.), and Kelly Freed (Metro State College).



Jun Lin (left) and Leonard Strachan (both, CfA) described a method for forecasting solar energetic proton fluxes near the Earth from UV spectroscopy of coronal mass ejections.



Jiong Qiu (left, Big Bear Solar Obs.) discussed magnetic reconnection and rising flux ropes in solar eruptions; Siming Liu (Stanford U.) investigated electron acceleration near the galactic center black hole.



Philip Armitage (U. Colorado) gave an invited talk on exoplanets.



Participants in a session on Detecting the First Stars and AGN included (l-to-r) Raffaella Schneider (Enrico Fermi Ctr., Rome), Yong-Zhong Qian (U. Minnesota), Rachel Somerville (Space Telescope Science Inst.), Alexander Heger (Los Alamos Natl. Lab.), Ken'ichi Nomoto (U. Tokyo), Aparna Venkatesan and Nick Gnedin (both, U. Colorado), Jason Tumlinson (U. Chicago), and session co-organizer Michael Shull (U. Colorado).



Jean Swank (left, NASA GSFC) met undergraduate Fred Crawford (Prairie View A&M U.) at an orientation session.



Kasiviwanathan Sankar (National Solar Obs.) measured photospheric magnetic fields at very high spatial resolution.



Far-ultraviolet observers included (l-to-r) Jerry Edelstein and Kaori Nishikida (both, U. California, Berkeley), who worked with South Korea's first scientific satellite, and Jeffrey Linsky (U. Colorado), who studied deuterium with FUSE.



L-to-r: Michael Pahre (CfA) classified galaxies with Spitzer images; Eric Bell and Daniel Zucker (both, Max-Planck Institute for Astronomy, Heidelberg) found a companion of M31 that may be the lowest luminosity galaxy known, with favorable consequences for the theory of Cold Dark Matter.



Aurora Sicilia-Aguilar (Smithsonian Astrophysical Obs.) explored accretion on low-mass stars during the epoch of planet formation.

ANNOUNCEMENTS

AAS Book/Journal/Equipment Donation Forum

Many members are not aware of the Book/Journal/Equipment Donation Forum, an online resource for those who wish to donate or request books, journals and equipment. Through this service (www.aas.org/donation), anyone may post items that they wish to donate or request materials that their organization may need. Shipping arrangements for the materials must be worked out between the donor and recipient and the AAS will not provide valuation estimates for any item. Before you sell that old physics textbook on E-bay or throw that old journal set in the garbage, why not let the Donation Forum give your materials a second shot at usefulness.

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	2004 Oct 1	2005 Feb - 2005 May	
	2005 Feb 1	2005 Jun - 2005 Sep	
VLA	2004 Oct 1	2005 Feb - 2005 May	+
	2005 Feb 1	2005 Jun - 2005 Sep	*
VLBA	2004 Oct 1	2005 Feb - 2005 May	
	2005 Feb 1	2005 Jun - 2005 Sep	

Notes: (+) B configuration with a maximum baseline of 11 km.
(*) C configuration with a maximum baseline of 3 km.

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, the NRAO has inaugurated a new program to support GBT research by students at U.S. universities. The program 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.

The NRAO and the European VLBI Network jointly handle proposals for observing time on the Global VLBI Network at centimeter wavelengths; the deadline is 1 October 2004 for the session in February/March 2005. Also, the NRAO and a set of European observatories jointly handle proposals for VLBI observing time at a wavelength of 3mm; the deadline is 1 October 2004 for the session in April 2005. 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.

CSO Call for Proposals Due 31 October 2004

The Caltech Submillimeter Observatory (CSO) encourages observing participation by astronomers from both U.S. and non-U.S. institutions. For instructions on applying and for information about available instruments, including new bolometer cameras, see <http://www.submm.caltech.edu/cso/cso-call.html>.

Applications for observing time between 1 February 2005 through 31 July 2005 are due by mail 31 October 2004. Applications will be reviewed by an outside peer group.

NASA Infrared Telescope Facility Observing Proposals

Due date for the 1 February 2005 to 31 July 2005 semester is 1 October 2004. 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 (estimated to be available in Oct.); (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. The Adaptive Optics system will be available on a shared-risk basis.

NSO Observing Proposals

The current deadline for submitting observing proposals to the National Solar Observatory is 15 August 2004 for the fourth quarter of 2004. 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://www.nso.edu/nsosp/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. Observing time at National Observatories is provided as support to the astronomical community by the National Science Foundation.

Graduate Research Fellowship Program

In August, applications will be available for the National Science Research Foundation's Graduate Research Fellowship Program. Deadline for proposals in Physics and Astronomy will be in early November. NSF fellows receive three years of financial support including a \$30,000 annual stipend and \$10,500 cost-of-education allowance. Applicants must be U.S. citizens, nationals or permanent residents and at or near the beginning of their graduate studies in the science, mathematics, and engineering disciplines. For more information, please refer to www.nsf.gov/grfp/.

President's Commission on Moon to Mars Releases Report

In response to media reports derived from a leaked copy of its report, the President's Commission on the Moon to Mars and Beyond initiative was forced to release their recommendations on June 16. Coming on the same day as one of the final hearings of the 9/11 commission did not prevent the report from attracting some media attention.

The recommendations specifically dealing with science issues and the Commission's "Notional Science Research Agenda" are reproduced below. The full report in PDF format can be found at <http://www.moontomars.org/docs/M2MReportScreenFinal.pdf>.

It is unclear if the recommendations could broadly harm astronomy. It is clear that if they are implemented without careful input from the community, they could do more harm than good. Continued interaction with the science community via advisory panels, the NRC's Committee on Astronomy and Astrophysics and the Space Studies Board and attention to the Decadal Surveys of the Solar and Space Physics, Planetary and Astronomy and Astrophysics communities will be critical to the continued health of NASA-funded research. It is incumbent both on the science community and on NASA to work together to implement the broad notional science research agenda. AAS President Bob Kirshner provided an excellent perspective, it is important not to throw out the "science baby" with the "shuttle-station bathwater." Space Science activities at NASA have been an outstanding success. Through careful cooperation, they will continue to be.

Science-related Recommendations

Implementing the space exploration vision will be enabled by scientific knowledge, and will enable compelling scientific opportunities to study Earth and its environs, the solar system, other planetary systems, and the universe. The Commission recommends:

- NASA seeks routine input from the scientific community on exploration architectures to ensure that maximum use is made of existing assets and emerging capabilities;
- NASA asks the National Academy of Sciences to engage the scientific community in a re-evaluation of priorities to exploit opportunities created by the space exploration vision. In particular, the community should consider how machines and humans, used separately and in combination, can maximize scientific returns; and
- a discovery-based criterion to select destinations beyond the Moon and Mars that also considers affordability, technical maturity, scientific importance, and emerging capabilities including access to in-situ space resources.

A Notional Science Research Agenda

Origins

- The Big Bang: the structure and composition of the universe including the formation of galaxies and the origin of dark matter and dark energy.
- Nebular composition and evolution: gravitational collapse and stellar ignition.
- Formation of our solar system and other planetary systems; clues to the origin of the solar system found in meteorites, cosmic dust, asteroids, comets, Kuiper Belt Objects, and samples of planetary surfaces.
- Pre-biotic solar system organic chemistry: locations, histories, and processes; emergence of life on Earth; interplay between geological and astronomical processes.

Evolution

- The Universe: processes that influence and produce large-scale structure, from sub-nuclear to galactic scales.
- Stellar Evolution: nucleosynthesis and evolutionary sequences, including the influence of particles and fields on the space environment.
- Planetary Evolution: the roles of impact, volcanism, tectonics, and orbital or rotational dynamics in shaping planetary surfaces; structure of planetary interiors.
- Comparative Planetology: study of Earth as a terrestrial planet; divergence of evolutionary paths of Earth, Venus, and Mars; comparisons of giant planets and extrasolar planets.
- Atmospheres: early evolution and interaction with hydrospheres; longterm changes and stability.
- Search for Habitable Environments: identification and characterization of environments potentially suitable for the past existence and present sustenance of biogenic activity.

Fate

- Biology of species in space: micro- and fractional gravity, long-term effects of exposure to variable gravity; radiation; avoidance and mitigation strategies.
- Impact Threat: cataloguing and classification of near-Earth objects; estimation of the recent impact flux and its variations; flux variation with position in solar system; hazard avoidance and mitigation.
- Natural hazard assessment: advanced space-based characterization of meteorological, oceanic, and solid Earth natural hazards to diminish consequences and advance toward predictive capability.
- Temporal variations in solar output: monitoring and interpretation of space weather as relevant to consequence and predictability.
- Climate change: assessment of recent climatic variations; solar controls on climate change; quantitative modeling and testing of the greenhouse effect; and possible effects on planets and life.
- Long-term variations of solar system environment: galactic rotation and secular variations; local supernovae.

Employment Committee continued from page 10

I began working in this field after my first astronomy postdoc. I had been spending an increasing amount of time thinking about the serious problems we humans are facing—the degradation of our environment, the still-present threat of nuclear weapons, and the fragile state of security we live in—and determined to find a way to use my technical training to bear on these issues. Since there are relatively few people in the field, one needs to be creative. Technical policy analysts are mainly clustered in think tanks and universities, though there are scientists and engineers on staff of the Congressional committees, government agencies, and scientific professional societies.

If you're interested in working in this field, there are a number of things you can do to prepare. 1. Get practice: take every opportunity to speak before and write for different audiences. 2. Get informed: read the newspaper and subscribe to a newsletter like SecurityNet http://www.ucsusa.org/global_security/armsnet/index.cfm 3. Get involved: take advantage of opportunities to learn the mechanics of how science informs public policy, like the AAS Congressional Visit Day, and fellowships sponsored by the AAAS and APS, strike up a correspondence with your governmental representatives. And of course, feel free to contact me at lgrego@ucsusa.org, if you have other questions!

Committee on the Status of Women continued from page 10

Astronomy II meeting (WIA II) in Pasadena last year. We showed the working draft to (then) AAS President Caty Pilachowski, who provided some very useful suggestions, and met with her about several other issues.

The last day of the Denver meeting was the focus for the CSWA. First, Elaine Seymour gave a very interesting and entertaining invited talk on alternatives to faculty careers for women who obtain their PhDs in science.

This was followed by the CSWA co-sponsored special session on “The Astronomy Workforce.” The CSWA has requested that the speakers allow their presentations to be posted on our website, see <http://www.aas.org/~cswa/>. Rachel Ivie (AIP), Kevin Marvel (AAS), and Fran Bagenal (U. Colorado) each presented complementary views of the statistics on women through their career paths in astronomy. Rachel Ivie concentrated on the relative percentages of women who enter graduate school in astronomy, those who obtain postdocs, and those who end up as faculty in

astronomy departments that are separate from physics departments. While astronomy compares favorably to physics in the sense that a higher percentage of women who obtain PhDs in astronomy go on to faculty positions, the fraction is still lower than predicted based on projecting percentages forward in time. Fran Bagenal reached a similar conclusion using a different data set. Fran also noted that having children can adversely affect a woman's success on the tenure track, and that timing is everything! Her results also appear in the June 2004 issue of *STATUS*. Kevin Marvel presented updated statistics from the AAS membership, again noting that more than 50% of members under the age of 23 are women. This talk highlighted the fact that astronomy as a field has a tremendous opportunity right now to not only set up a long-term study to determine how these women progress during their careers, but also to work on facilitating their success at every stage.

With the stage ably set by the morning sessions discussed above, the CSWA held its own session in the early afternoon. It began with a report on the progress on the WIA II Recommendations (see above). This was followed by a panel discussion about the Seymour talk and statistics presented in the Astronomy Workforce session. The CSWA asked the panel members and session attendees to consider what they had heard, and what logical steps could the CSWA and AAS take to facilitate increasing the number of women who make astronomy their career. The panel consisted of Meg Urry (Director, Center for Astrophysics at Yale University), Andrea Schweitzer (Little Thompson Observatory, and chair of the AAS Employment Committee), Kelsey Johnson (currently a postdoc at U. Wisconsin, joining the faculty of Virginia this fall), and Quyen Hart (graduate student, U. Colorado). The panel members each presented a brief description of their impressions of the morning sessions, and then the floor was opened for questions and discussion. As usual, we ran out of time, but we came away with some excellent suggestions and ideas to contemplate. Arlo Landolt emphasized the importance of nominating qualified women scientists for prizes and inviting them to give talks. As at the WIA II meeting, mentoring at all levels of a scientist's career was felt to be critical. Also noted was that an area that has generally been neglected, but is important, is the impact of family issues on graduate students. If a graduate student needs to take an extended leave of absence, whether it is to care for a child, an ill relative, or some other reason, it is unlikely that they will be financially supported. Furthermore, it can be very difficult for a student to return. Meg Urry noted that some institutions are beginning to grapple with this issue. Andrea Schweitzer pointed out that in the corporate world policies have been designed to deal with the similar issue for soldiers called to active duty. Those policies might provide a starting point. The session had to be called to a halt then, but the CSWA will take the ideas that arose and discuss ways to implement them. We would like to thank everyone who attended and participated.

From the Division of Astronomical Sciences Director

Dear Colleagues,

The end of our FY2004 proposal season is fast approaching. As I have said to those of you who served on this year's review panels, about 70% of those who submitted proposals are disappointed and perhaps wondering what can be done to be successful, particularly if this has been the second or third try. I offer these thoughts, which I recently communicated to one such disappointed and somewhat frustrated PI:

I can understand your frustration but, in light of the results of the panel that you competed in, offer the thought that you are in very good company. The competition has been fierce and proposals ranked below yours in the panel were also from experienced, successful PIs. I know that this is presently, at best, an interesting statistic. However I point it out to illustrate something even the most senior folks tend to forget—the fact that the proposal does not make the cut, that there are criticisms expressed in the reviews, should not be taken as a rejection of the value of the research. With a very few exceptions, all the proposals we receive are worthy of funding. The sad fact is that there is just not enough money available to help them all. One must persevere and continually hone the presentation of what it is you want to do and why it is important. In a very real sense, we ask the reviewers, and the panel in particular, to consider and intercompare the PROPOSALS in front of them. What they judge and rank are the words presented to them and the plans that these words support and form. Some are experts in the sub-field that you work in, some are experts in other areas. It is up to the proposal to make it clear to everyone why you are doing the work, how you are going to proceed, how this relates to similar efforts and where it fits in the overall tapestry of astronomy. A tall order in 15 pages without doubt, but it is done.

So much for generic statements and on to some specifics and suggestions. The first is that you must read the reviews thoroughly and dispassionately—again a tall order. However these are your colleagues telling you why, despite the possible advances that your results might enable, they could not rank your proposal higher in the company of those in front of them at the time. In that regard I read far more helpful remarks in most reviews than the statements usually quoted by the PI in trying to understand a declination.

Second—do not get discouraged; as I said, the competition is stiff; many people have to try multiple times to be successful. You probably ranked much higher in this year's panel than last time. Start thinking now about the next proposal. Parse the reviews carefully and lay them out against an outline of the proposal. Look to where a new result, a sample calculation, more carefully explained error analysis or a few added sentences of comparison with other work would have helped.

Third—when you have a draft of the proposal that you and your collaborators are really happy with, find someone who is willing to play “junkyard dog” with it. Best if this is someone who works in an area somewhat removed from you—can you convince her that this work must be done and that you are the folks who must do it.

I hope this is helpful. Understand that I cannot guarantee success, but this should get you closer. Perhaps the summary statement should be that, while we engage in the SCIENCE of astronomical research, we seek funding in a system that requires considerable practice in the ART of proposal writing and communication.

And we really ARE happy to consider your next proposal.

Best wishes,
Wayne

G. W. Van Citters
National Science Foundation
Director, Division of Astronomical Sciences

NEWS FROM THE AAS JOURNALS

New APJ Scientific Editors

Earlier this year two new Scientific Editors joined the *ApJ* staff.

Brian Chaboyer is an Associate Professor in the Department of Physics and Astronomy at Dartmouth College, and a leading expert in theoretical stellar astrophysics. He will be handling manuscripts in this area as well as in observational stellar astronomy, stellar populations, and related subjects.

Brad Gibson is a Professorial Fellow and Deputy Director of the Centre for Astrophysics at Swinburne University in Melbourne, Australia. His broad research interests include chemical abundances and evolution over a wide range of astrophysical environments, stellar populations, galactic evolution, and cosmology. He will be handling *ApJ* manuscripts in all of these areas.

Over the past year two longstanding *ApJ* SE's completed their service to the *ApJ*, John Huchra and Steve Shore. Shore has now taken up a similar position with Astronomy and Astrophysics, which is moving to a Scientific Editor model.

Special *ApJ* Supplements Issue: Results from the Spitzer Space Telescope

Since 2002 the *ApJ Supplements* has published a number of special issues devoted to coordinated sets of papers from large projects (the most recent being the September 2003 issue on the first-year results from the WMAP mission). The September 2004 issue will contain approximately 85 papers presenting early results from the Spitzer Space Telescope. These are short Letters length papers, but published together in the Supplements to accommodate the large number of early-results papers. The electronic version of the issue is scheduled to post in early August, with the paper edition appearing in September.

ASP NEWS

Michael Bennett, Executive Director, mbennett@astrosociety.org

Sharpening the ASP's Focus

Every organization, especially one that's 115 years old, needs to stand back every now and then and look in the mirror—to make sure we understand what we are doing, why we are doing it, and, if necessary, to think about making some changes. Over the past 18 months, the Board, staff, and members of the ASP have been conducting a very interesting strategic analysis and planning process. We made no stunning discoveries and no radical decisions. But like any good astronomer, we did decide to tweak the focus a bit to get it just right.

It became increasingly apparent that over the years, by trying to be “all things to all people” in astronomy, we had developed not one reputation, but many. Even among the staff and board there were multiple overlapping ideas about what the Society's priorities should be. At the same time, we reaffirmed that the ASP is doing a lot of things right—and we shouldn't mess with success too much.

We thought long and hard about what the main role of the ASP should be. How can the ASP really make a difference? What unique and special roles can we—should we—play in order to best fulfill our mission to increase the understanding and appreciation of astronomy. In retrospect the conclusion seems obvious. Over the past several years, almost without really trying to, we have become a leader in the field of astronomy education and outreach. That is clearly our special and unique niche.

Of course, education doesn't happen only in classrooms, and there is a lot more to it than learning new facts. True education is about uncovering and stimulating the innate curiosity, wonder, and excitement in all of us. It's about passion as much as facts. If the ASP can help more people get excited about the universe, if we can help more people want to learn more about the universe, we will be accomplishing our mission.

Our mission hasn't changed, but it has become more sharply focused. The ASP is about astronomy education, and our constituents are all the people who *do* astronomy education or who *support* astronomy education—not just teachers and university faculty, but researchers who get involved in education and outreach; informal educators such as museum and planetarium staff; education and outreach *practioners*—the growing number of people at NASA, at observatories, and at universities who are charged with developing and distributing educational materials, products, and services to all sorts of audiences; and the many thousands of amateur astronomers who express their love of the hobby by sharing it with others. They are all astronomy educators and they are the audiences we serve.

At the same time, our technical publications, *PASP* and the *Conference Series*, are definitely not going away. They serve an important role, and they will continue to grow and change to meet the needs of the astronomy research community.

Over the next few years, other facets of the ASP may evolve as we continue to strengthen our commitment to education and outreach. The programs and projects we embark on, our membership strategy, *Mercury*, our annual meeting, all will become more focused on education and on supporting and celebrating the dedicated people who help others widen their horizons.

We welcome your participation, your support, and even your criticism as we continue to fulfill the mission of the founders of the ASP—to increase the understanding and appreciation of astronomy. *Katy Garmany, ASP President*

Astronomy Education Conference

The ASP is sponsoring a major conference on astronomy education and outreach 21-23 September 2005, in Tucson, AZ. “Building Community: The Emerging EPO Profession” will be aimed at those who develop, disseminate, and use astronomy education and outreach products, materials, and programs in both formal and informal settings. Mark your calendar now to attend this important conference.

O'KEEFE AT DENVER MEETING



On 1 June 2004 at the AAS meeting in Denver, NASA Administrator Sean O'Keefe addressed the meeting attendees to share his justification for canceling manned servicing missions to the Hubble Space Telescope and announce the release of a request for proposals to robotically service the telescope. In remembrance of the Shuttle Columbia astronauts who tragically lost their lives in a fiery return to Earth in February 2003, Mr. O'Keefe distributed memorial mission pins to everyone attending his address stating that he wore his each and every day.

His full speech is available through the NASA web pages at the following link: http://www.nasa.gov/audience/formedia/speeches/ok_astronomical_060104.html

AAS Members Among Academy of Arts and Sciences Fellows and Honorary Members

The American Academy of Arts and Sciences announced the election of 178 new fellows and 24 foreign honorary members for 2004. Election to the Academy has always been one of the highest honors in the United States. The Academy has elected as Fellows and Foreign Honorary Members the finest minds and most influential leaders from each generation, including George Washington and Ben Franklin in the eighteenth century, Daniel Webster and Ralph Waldo Emerson in the nineteenth, and Albert Einstein and Winston Churchill in the twentieth.

Congratulations to the following AAS Members:

- Steven V. M. Beckwith**, Director, Space Telescope Science Institute
Charles L. Bennett, Senior Scientist for Experimental Cosmology, NASA
Claude R. Canizares, Bruno Rossi Professor of Physics, Massachusetts Institute of Technology
Andrea Ghez, Professor of Astronomy, University of California, Los Angeles
Lyman Alexander Page, Professor of Physics, Princeton University
Maria T. Zuber, E. A. Griswold Professor of Geophysics and Planetary Sciences, Massachusetts Institute of Technology

Peebles Wins Shaw Prize

The Shaw Prize in Astronomy 2004 was awarded to **P. James E. Peebles** (Princeton University) for his having laid the foundations for almost all modern investigations in cosmology, both theoretical and observational, transforming a highly speculative field into a precision science.

The Shaw Prize was established under the auspices of Mr. Run Run Shaw in November 2002, to honor scientists, regardless of race, nationality and religious belief, who have achieved significant breakthrough in academic and scientific research or application, and whose work has resulted in a positive and profound impact on mankind. The Prize consists of three annual prizes: Astronomy, Life Science and Medicine, and Mathematical.

COSPAR Awards

Dr. Stephen S. Holt will receive the COSPAR International Cooperation Medal in recognition for his work in fostering international cooperation in x-ray astronomy. The medal is awarded to a scientist who has made distinguished contributions to space science and whose work has contributed significantly to the promotion of international scientific cooperation.

Dr. Louis J. Lanzerotti will receive the COSPAR William Nordberg Medal, which is awarded to a scientist who has made a distinguished contribution to the application of space science in a field covered by COSPAR. Dr. Lanzerotti is being recognized for his important discoveries in space physics, especially his results on the effects of space weather on the terrestrial environment and on technological systems.

These medals were presented along with other awards at COSPAR's 35th Scientific Assembly to be held in Paris, France on 18-25 July 2004.

All five students have been invited to publish papers describing their projects in the IAPPP Communications, an international journal specializing in collaborative astronomy research projects involving students, amateurs and professional astronomers. They will also be invited to present their projects at the upcoming AAS meeting. The high school science departments of each student will receive \$1000. Since 2000, the scholarships and science department contributions have been provided by a grant from the National Science Foundation's Astronomy Division, administered by the AAS on behalf of the three participating professional organizations.

Science Service publishes the weekly Science News, and hosts the ISEF. Each year about 1,200 students from over 50 countries compete at the Intel ISEF for scholarships, tuition grants, internships, and scientific field trips. The Grand Prize awardees are invited to attend the Nobel Prize Ceremony in Stockholm, Sweden. The AAS, ASP and IAPPP have co-sponsored special awards in astronomy at the annual ISEF since 1991. Additional information about the ISEF can be found at www.sciserv.org



Eric M. Sauder (top) and Julie Ann Krugler

CALENDAR

AAS & AAS Division Meetings

8th HEAD Meeting

8-11 Sept 2004 — New Orleans, LA
Contact: Dr. John Vallerga
(info@eurekasci.com)
www.eurekasci.com

36th DPS Meeting

7-12 November 2004 - Louisville, KY
Contact: Tim Dowling
(dowling@louisville.edu)
<http://dps04.org>

Other Events

Science with Wavelengths on Human Scales: A Celebration of the 74th Birthday of Bill Erickson and Low Frequency Radio Science Meeting

8-11 September 2004 — Santa Fe, NM
Contact: Patricia Henning
(henning@as.unm.edu)
<http://lwa.nrl.navy.mil/WCE>

IAU Symposium No. 226 - Coronal and Stellar Mass Ejections

13-17 September 2004 — Beijing, China
Contact: Kenneth Dere
(cme2004@bao.ac.cn)
http://lasco-www.nrl.navy.mil/~avourlidcme_mtg/

*Science with LSST and Other Large Surveys: Community Access and Utilization of Future Archives

20-22 September 2004 — Seattle, WA
Contact: Kem Cook (kcook@noao.edu)
<http://www.lsst.org/Meetings/CommAccess>

New Windows on Star Formation in the Cosmos

11-13 October 2004 — College Park, MD
Contact: Susan Lehr
(october@astro.umd.edu)
<http://www.astro.umd.edu/october/>

Large Scale Structures and Their Role in Solar Activity

18-22 October 2004 — Sunspot, NM
Contact: K. Sankarasubramanian
(sankara@nso.edu)
www.nso.edu/general/workshops/2004/

Astrometry in the Age of the Next Generation of Large Telescopes

18 - 20 October 2004 — Flagstaff, AZ
Contact: David Monet
(dgm@nofs.navy.mil)
<http://www.nofs.navy.mil/astrom2004>

Astronomical Data Analysis Software and Systems XIV (ADASS)

24-27 October 2004 — Pasadena, Ca
Contact: Thomas H. Handley, Jr.
(adass@ipac.caltech.edu)
<http://adass.ipac.caltech.edu/>
<http://adass.org/>

Galaxy-Intergalactic Medium Interactions

25-29 October 2004 — Santa Barbara, CA
Contact: Piero Madau
(pmadau@ucolick.org)
http://www.kitp.ucsb.edu/activities/gimi_c04?id=302

Third CHANDRA Calibration Workshop

25-26 October 2004 — Cambridge, MA
Contact: CHANDRA Calibration Workshop Organizing Committee
(ccw@head-cfa.harvard.edu)
<http://cxc.harvard.edu/ccw/>

Workshop on Chondrites and the Protoplanetary Disk

8-11 November 2004 — Honolulu, HI
Contact: Alexander N. Krot
(sasha@higp.hawaii.edu)
<http://www.lpi.usra.edu/meetingschondrites2004/>

The Spitzer Space Telescope: New Views of the Cosmos

9-12 November 2004 — Pasadena, CA
Contact: Andrea Dean
(spisci1@ipac.caltech.edu)
<http://ssc.spitzer.caltech.edu/mtgs/newviews/>

*AVS 51st International Symposium & Exhibition

14-19 November 2004 — Anaheim, CA
Contact: Stan Goldfarb
(stan@exxustech.com)
<http://www2.avs.org/call/default.asp>

22nd Texas Symposium on Relativistic Astrophysics

13-17 December 2004 — Stanford/Palo Alto, CA
Contact: Maura Chatwell
(maura@slac.stanford.edu)
<http://texasatstanford.slac.stanford.edu/>

*Planet Formation and Detection

6-12 February 2005 — Aspen, CO
Contact: Fred Rasio
(rasio@northwestern.edu)
<http://www.astro.northwestern.edu/AspenW05/>

From Young Disks to Planets: New Observations, Models and Theories

7-10 March 2005 — Pasadena, CA
Contact: Rafael Millan-Gabet
(disks05@ipac.caltech.edu)
<http://msc.caltech.edu/conferences/2005/disks05/>

Grand Challenge Problems in Computational Astrophysics

7 Mar - 10 Jun 2005 — Los Angeles, CA
Contact: Mark Morris
(pca2005@ipam.ucla.edu)
<http://www.ipam.ucla.edu/programs/pca2005/>

*IAU Colloquium No. 198

Near-Field Cosmology with Dwarf Elliptical Galaxies
13-18 March 2005, Les Diablerets, Switzerland
Contact: Helmut Jerjen
(jerjen@mso.anu.edu.au)

*IAU Colloquium No. 199

Probing Galaxies through Quasar Absorption Lines
14-18 March 2005, Shanghai, China
Contact: Brice Ménard (menard@ias.edu)

*IAU Symposium No. 227

Massive Star Birth: A Crossroads of Astrophysics
15-19 May 2005, Catania, Sicily, Italia
Contact: Peter S. Conti
(pconti@jila.colorado.edu)

*IAU Symposium No. 228

From Lithium to Uranium: Elemental Tracers of Early Cosmic Evolution
16-20 May 2005, Paris, France
Contact: Vanessa Hill
(Vanessa.Hill@obspm.fr)

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

26-29 July 2005, Nusa Dua, Bali, Indonesia
Contact: Premana W. Premadi
(premedi@as.itb.ac.id)

*IAU Symposium No. 229

Asteroids, Comets, Meteors - ACM 2005
8-12 August 2005, Rio de Janeiro, Brasil
Contact: Daniela Lazzaro (lazzaro@on.br)

***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)

***IAU Symposium No. 231**

Astrochemistry throughout the Universe: Recent Successes and Current Challenges

29 August - 2 September 2005

Monterey, CA

Contact: Eric Herbst (herbst@mps.ohio-state.edu)

***Class on Finding Astronomical Images at the Science, Industry and Business Library, NYPL**

14 September 2004 - NY, NY

Contact: Michael Wenyon
212-592-7000

***IAU Colloquium No. 200**

Direct Imaging of Exoplanets: Science and Techniques

3-7 October 2005, Nice, France

Contact: Claude Aime
(Claude.Aime@unice.fr)

Protostars and Planets V

24-28 October 2005 — Honolulu, HI

Contact: Bo Reipurth
(reipurth@ifa.hawaii.edu)
<http://www2.ifa.hawaii.edu/CSPF/ppv/ppv.html>

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@aas.org. Meetings that fall within 30 days of publication are not listed.

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

MARIAN KOSHLAND SCIENCE MUSEUM

The Marian Koshland Science Museum, a new museum exploring the links between scientific research and everyday life, opened its doors to the public in April—revealing the science driving today's headlines and affecting our lives every day. The Koshland Science Museum will be the only museum in the nation's capital solely dedicated to exploring the science at the core of public policy decisions and the only museum in the world operated by the National Academy of Sciences—a private, nonprofit organization created by a congressional charter in 1863 to advise

the government on scientific and technical matters.



Visitors to the Koshland Science Museum will discover the practical applications and social implications of scientific research through engaging exhibits that involve unique interactive displays, graphics, videos, and scientific projections. Visitors will be able to piece together the scientific

evidence behind current and often controversial issues, discovering how that evidence influences policy decisions relevant to their daily activities.

The Marian Koshland Science Museum is named after Marian Koshland (1921-1997), a National Academy of Sciences member who made major contributions to the field of immunology and molecular biology throughout her career, including work on the cholera vaccine and groundbreaking research in the behavior of antibodies. This new museum has been made possible by a \$25 million endowment from her husband, Daniel Koshland, also a member of the National Academy of Sciences.

Text excerpted and adapted from The Marian Koshland Science Museum's press releases of 16 April 2004 and 17 November 2003. See www.koshland-science-museum.org for location and hours.

Image courtesy of the Marian Koshland Science Museum. Climate Change Hits Home: Various globes illustrate the geographic diversity of climate change and its impact on society and nature, detailing the projected effects on agriculture, animals and plants, water supply, human health, and traditional cultures.

2005 MEMBERSHIP DIRECTORY

Changes in member or institutional information for the 2005 *Membership Directory* must be received in the Executive Office by **3 September 2004!!**

Use the change of address from on the website at www.aas.org or email the change to address@aas.org.



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



The Heat Is On!

Washington in summer is a bit like swimming through a hot aquarium. Inside the Beltway the temperature and humidity combine to make just walking around a bit like swimming and everyone outside the Beltway is looking in, hoping to see some action.

Technically, the Federal Budget is crafted during the summer and ultimately signed into law by the President in time for the start of the new fiscal year on October 1. This date has become nothing more than words in the Federal Regulations. Last year, the budget was not passed until late January 2003, just days before the President's State of the Union address.

This year could be worse. Neither party wants to have the budget become an election-year issue so negotiations on most appropriations bills have come to a stand-still. The exceptions seem to be the Department of Homeland Security,

Department of Defense and Military Construction appropriations bills, which are making progress through the political process.

NASA and NSF, funded through the VA-HUD-IA Appropriations bill and the Department of Energy, funded through the Energy and Water Appropriations bill will be delayed at least until after the elections and, pending the election results, into 2005.

These delays in the appropriations process have obvious negative impacts on governmental agencies, delaying new starts and holding funding at previous year funding levels. The science community (and anyone who derives support from the government) will have to tighten our belts and wait out the process.

We can and should let our legislators know that delays in the appropriations process have deleterious impacts on our research, potentially our students and our larger projects and missions. Take a moment or two to send in some polite comments to your legislators and let them know how you feel. As always, you may find the contact information for your legislator using the Zip-To-It feature on the AAS public policy web pages (http://www.aas.org/policy/aas_bios.html).