## Number 106 + August 2001

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

## PRELIMINARY SLATE, 2001 AAS ELECTIONS; Last Call for Nominations

The following have been nominated for office; most of the terms begin June 2002. Additional nominees are welcome.

Vice-President	Pierre Demarque John B. Hutchings
Treasurer	Leonard V. Kuhi
Councilors	Daniel R. Altschuler Bruce W. Carney Isabel Hawkins Christopher Sneden Jean H. Swank John H. Thomas
Publications Board Chair	Raymond G. Carlberg Sumner G. Starrfield
USNC-IAU	Nicholas E. White
Nominating Committee	Richard H. Durisen Margaret M. Hanson Horace A. Smith

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 Monday, 17 September 2001 in the Office of the Secretary. Send nominations to: Arlo U. Landolt, Louisiana State University, Department of Physics and Astronomy, Baton Rouge, LA 70803-4001. The final slate will be announced in the October Newsletter and the ballot will be mailed with the December Newsletter which will also contain the statements of the candidates.

#### HIGHLIGHTS

2002 Dues and Subscription Rates	2
Pasadena Council Actions	3
Major New Astronomy Prize Endowed	3
2000 AAS Fiscal Report	4
2001 Small Research Grants	5
AAS Prize Nomination Form	7
Pasadena Meeting Highlights	8
Highlights of SPD Meeting with AGU	14
Astronomy in President's First Budget	22

# **PUBLISHING NEWS**

## **ApJ Letters Editor Dalgarno To Retire**

Alexander Dalgarno has announced his intention to retire as the Editor of the Astrophysical Journal Letters, effective with the completion of his current term at the end of 2002. Dalgarno has served as the Letters Editor over most of its existence as a separate journal, and will have completed 29 years in the editorship upon his retirement. His tenure has seen the journal quadruple in size, with over 1000 manuscripts handled by his office last year.



Alex Dalgarno will have served as Editor of the Astrophysical Journal Letters for twenty-nine years when he retires at the end of 2002.

Alex's retirement as Editor will allow him to spend more time on his research, which has focused on atomic, molecular and optical physics and its applications to astrophysics. Earlier this year he was recognized for this work with his election to the National Academy of Science. The AAS has been fortunate to have a scientist of Dalgarno's caliber serving in the editorship of one of its leading research journals, and the search committee (see page 11) will have a challenging task ahead as it seeks a worthy successor.

Continued on page 11

### Change in ApJ Letters Submissions Procedures

On 23 July, the ApJ Letters office in Cambridge switched from email submission to the web-based author submission and peer review system used by the ApJ Tucson office. ApJ Letters authors are requested to use the web site (http://mss.uchicago.edu/ApJ/) for all new and revised Letters submissions. Reviewers may continue to email referee reports to apjlref@cfa.harvard.edu or may instead use the web interface at the URL above.

For the latest information about ApJ Letters submission procedures, please see http://cfa-www.harvard.edu/apjl

## 2002 Membership Invoices Mail in Sept.

The 2002 AAS Membership renewal invoices will be mailed in late September. To add subscriptions, change journal mailing options, or join Divisions, refer to the 2002 Membership Renewal Brochure which will accompany the invoice.

To avoid interruption of service, pay your fees with the first invoice mailing. See page 2 for new dues and subscription rates for 2002.

## **LETTERS TO THE EDITOR**

#### A Good Time To Be Gay in Astronomy?

Dear Editor,

These are good times to be in astronomy. These are good times to be in astronomy as a gay man. When I came out in graduate school, there was a support group ready to help me deal with this wonderful, confusing, and frightening process of discovery. Soon thereafter, I found a group of gay and lesbian professional astronomers that showed me what it meant to be comfortable with who I am. Today, I work at an institution whose non-discrimination policy explicitly includes sexual orientation and that offers same-sex domestic partner benefits. So things are good, or are they?

During the last AAS meeting in Pasadena, like at many other AAS meetings before, I met up with a small group of openly gay astronomers to compare notes. This time I was struck by how common it still is to worry about that colleague, that faculty position, or that post-doc offer when it comes to affirming who we are and whom we love. And again I am wondering whether this was all in our heads, like so many, luckily groundless fears that sprung up in my head just before I came out as a gay man. After all this time, even today I sometimes hesitate to answer when someone in a professional context asks me: "So, are you married?"

This is why I decided to find out and to write this letter. My personal impression is that many in the astronomy research community live and work in a comfortable space when it comes to gay, lesbian, bisexual, and transgender issues. I have encountered much support, together with a few rare surprises. But perhaps my view is distorted by living in a large city with a large gay and lesbian population. If indeed astronomy is the good place I found it to be, I believe we all, gay or non-gay, should proudly celebrate this accomplishment of humanity. If it turns out that there is still work to be done, now is a good time to start.

I invite all readers to write to me with their impressions.

#### Rolf Danner

the Editors.

rolf.danner@jpl.nasa.gov

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

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

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

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

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

## **Dues, Subscription Rates for 2002**

In 2002 the AAS dues will increase by approximately 4.8%. This will be the first increase in dues in five years and is necessary to help offset inflationary increases in general operating costs.

Full Member	\$110
Associate Member	\$110
Emeritus Member (Paying)	\$ 55
Junior Member	\$ 37

(NB: When corrected for inflation, the 2002 AAS dues will be approximately the same as the AAS dues were in 1985.) Domestic rates for member subscriptions to the AAS journals will be as follows.

Electronic Package (ApJ, ApJS, AJ)	\$ 50
<i>ApJ</i> - Paper	\$260
ApJ Paper + Electronic Package	\$285
ApJ Supplement - Paper	\$ 55
AJ - Paper	\$ 95
AJ - Paper + Electronic Package	\$125
BAAS	\$ 27

(International shipping surcharges will increase only slightly from 2001 and these will be detailed on the renewal invoice.)

## Associate Members: Consider Upgrading

Only Full AAS Members have the right to hold office or to chair committees of the Society. Many Associate Members who are eligible to upgrade to Full Membership (at no increase in dues) and whose expertise could benefit the Society, cannot serve. Associate Members, please consider upgrading and becoming more involved with Society activities. (See a description of the different membership classes in the *Bylaws*, Article I. 1, or on the membership application form.) Both of these sources are in the *2001 Directory*. For questions, please contact the Society Secretary Arlo Landolt at aassec@rouge.phys.lsu.edu.

## **Keeping Our Records/Directory Current**

The deadline for updates for the paper edition of the 2002 Membership Directory — for both Member records and Institutions listed at the back of the Directory — is **3 August 2001**. Though we cannot guarantee this, if you've missed this deadline, send in your information *immediately* and it might still make the paper edition!

We receive information updates *throughout* the year. Member records are updated constantly and changes will appear in our online Membership Directory weekly (http://directory.aas.org). Send updated information as soon as you know it to address@aas.org.

## **COUNCIL ACTIONS**

The following are among the most noteworthy of the actions taken by the AAS Council at its 198<sup>th</sup> Meeting in Pasadena, California, on 3 June 2001. The Council

• Established a special registration rate for student guests, either high school or undergraduates, attending AAS meetings in the company of a faculty advisor from the institution at which they were registered;

• Accepted the AAS 2001 election results;

• Accepted the election of the new members to the 2001 Nominating Committe;

• Appointed A. I. Sargent, C. A. Pilachowski, J. C. Wheeler, R. E. Williams, L. V. Kuhi, A. U. Landolt and R. W. Milkey to the Executive Committee as described in *Bylaws*, Article VI.2, for the interval between annual business meetings, June 2001 to June 2002;

• Elected Donald Lynden-Bell an Honorary Member of the AAS;

• Re-elected R. W. Milkey to a term on the American Institute of Physics (AIP) Governing Board for the interval March 2002 through March 2005;

• Approved RSM McGladrey, Inc., to be the AAS auditor for fiscal year 2001;

• Accepted the auditor's report on AAS finances for 2000;

• Adopted the 2002 budget (see article on page 2 regarding new dues and subscription rates for 2002);

• Approved the proposed change to *Bylaws* Article VIII.3. Finances as published in AAS *Newsletter* Number 104, March 2001;

• Approved the Presidential recommendations for appointments to Committees;

• Accepted the recommendations of the Committee on Appointments;

• Elected Jane C. Charlton and Patrick S. Osmer to positions on the Publications Board for terms beginning 1 January 2002 and ending 31 December 2005;

• Accepted several individuals for positions as Scientific Editors of the *Astrophysical Journal* (see article on page 11.)

• Thanked V. L. Trimble for her gift endowing the AAS Instrumentation Award and voted to name the award the Joseph Weber Award for Astronomical Instrumentation (see following article, this page);

• Approved a potential membership list for the prize committee for the Joseph Weber Award for Astronomical Instrumentation;

• Approved a blanket rate for registration fees for all invited speakers at topical sessions at the member rate; and

• Delegated to the AAS Executive Committee the authority to name the final members of the *Astrophysical Journal Letters* Editor search committee.

## MAJOR NEW AAS PRIZE ENDOWED: Joseph Weber Award for Astronomical Instrumentation

The Council of the American Astronomical Society, at its summer meeting in Pasadena, approved the establishment of the Joseph Weber Award for Astronomical Instrumentation. The Council had long felt that, since state-of-the-art



Virginia Trimble and her late husband Joe Weber shortly after their marriage in 1972.

Photo by David Weber

instrumentation played such a crucial role in making astronomical observations, the Society should establish an instrumentation prize to recognize the developers of that instrumentation.

The establishment of the Award was made possible by a generous gift from **Virginia Trimble**, (past Vice-President of the AAS) in honor of her late husband, **Joseph Weber**, a physicist at the University of Maryland and the University of California at Irvine, and a long time member of the AAS. He passed away on 30 September 2000.

Weber always tackled problems requiring the development of new sophisticated instrumentation. He was known for his early work on the amplification of microwave radiation and most recently for the development of a coherent technique for neutrino detection. His most important work was the design, construction and operation of the first detectors for gravitational radiation. His pioneering effort stimulated the field of gravitational radiation and led ultimately to the LIGO project.

The Weber Award will be presented annually to an individual, of any nationality, for the design, invention or significant improvement of instrumentation (not including software) leading to advances in astronomy. In order that the scientific impact of the instrumentation may be assessed properly, a considerable period of time may have elapsed between the development of the instrumentation and the granting of the Award.

The Award carries no requirements or preferences as to age, gender, race, nationality or even membership in the Society.

An Award Committee has been appointed by the Council and will solicit nominations for the 2002 (first) winner of the Award. Send nominations by **1 October 2001** to the Joseph Weber Award Committee Chair, Joseph S. Miller, University of California, Lick Observatory, Santa Cruz, CA 95064; Tel: 831-459-2991, FAX: 831-459-5244, miller@ucolick.org

The Council and Officers of the AAS are extremely grateful to Virginia for her generous donation enabling the establishment of this award to recognize the outstanding contribution of instrumentalists to astronomy. THANK YOU!

## **2000 AAS FISCAL REPORT**

The firm of McGladrey & Pullen, which acquired Keller Bruner during 2000, audited the accounts of the Society for the year ending 31 December 2000. 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 provisions. This report was accepted by the Council at its meeting on 3 June 2001.

The Society reports its finances in six categories according to the nature of the activities and the source of the revenues, and these are outlined in the following notes and tables.

(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 mandate that each journal maintain a reserve fund equal or above the level of one half of the annual operating expenses. For 2000 each of the AAS journals maintained reserves above the required level.

(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** reflect the sum of all Division funds held both by the Division Treasurers and on their behalf by the Society Treasurer. Most of the fluctuations in their income and expense levels can be attributed to the timing and size of annual meetings and prize awards.

(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.

(5) *Grants and Contracts:* Two categories include, respectively, grants from Federal and non-Federal sources, specifically the:

- NASA Electronic Publishing grant;
- NASA Supported AAS Small Research Grant program;
- NSF International Travel Grant program;
- NSF supplement to the Bok and Lines Awards for students at the International Science and Engineering Fair; and
- AAS Funds used to supplement the Small Research Grants.

(6) *Other:* This includes the General Operating Reserve and accounts for the Shapley Visiting Lecturer Program, the Equipment Replacement Fund, the Journal Archive Fund, and a variety of other special purpose funds.

*Summary*: The overall financial picture for the Society remains very good. The net decreased by \$104,745 entirely due to an unrealized loss of \$219,435 in the market value of securities in which the reserve funds are invested. This is quite a modest loss on a fund that approaches \$8 million in total, considering the performance of the markets during 2000. It is hoped that market gains in 2001 will offset this loss.

## Table I. Statement of Income and Expense for 1999 and 2000

			1999			2000
_	Unrestricted	Restricted	Total	Unrestricted	Restricted	Total
Revenue						
General programs	\$ 1,222,801	-	\$ 1,222,801	\$ 1,181,893	-	\$ 1,181,893
Journals	6,128,566	-	6,128,566	6,478,442	-	6,478,442
Divisions	350,412	4,032	354,444	358,787	9,270	368,057
Bequests and Memorials	(22,000)	102,744	80,744	27,500	27,365	54,865
Grants and Contracts	134,421		134,421	312,981	-	312,981
Other	70,395	49,429	119,824	(15,413)	83,735	68,322
Released from restrictions	21,287/ <sup>a</sup>	(21,287)/ <sup>a</sup>	-	66,462	(66,462)	-
Total revenue	\$ 7,905,882	\$ 134,918	\$ 8,040,800	\$ 8,410,652	\$ 53,908	\$ 8,464,560
Expenses						
General programs	\$ 1,265,229	-	\$ 1,265,229	\$ 1,179,468	-	\$ 1,179,468
Journals	6,126,916	-	6,126,916	6,608,174	-	6,608,174
Divisions	425,713	-	425,713	323,298	-	323,298
Bequests and Memorials	30,940	-	30,940	52,288	-	52,288
Grants and Contracts	149,858	-	149,858	350,832	-	350,832
Other	103,396	-	103,396	55,245	-	55,245
Total expenses	\$ 8,102,052	-	\$ 8,102,052	\$ 8,569,305	-	\$ 8,569,305
Changes in net assets	\$ (196,170)	\$ 134,918	\$ (61,252)	\$ (158,653)	\$ 53,908	(104,745)
Net assets, beginning of year	\$ 7,438,794	\$ 348,299	\$ 7,787,093	\$ 6,440,009	\$ 1,285,832	\$7,725,841
Transfers	(802,615)/ <sup>a</sup>	802,615/ <sup>a</sup>	-	-	-	-
Net assets, end of year	\$ 6,440,009	\$ 1,285,832	\$ 7,725,841	\$ 6,281,356	\$ 1,339,740	\$ 7,621,096

/a: During the year ending 31 December 1999, management determined that certain funds previously classified as unrestricted were better classified as temporarily restricted.

Table II.	Balance	Sheet for 3	1 December	1999/2000
Tuble II.	Dulunoc		Decouniser	1000/2000

	1999	2000
Total Assets	<b>\$ 9,705,063</b>	<b>\$ 9,773,210</b>
Current Assets	2,357,814	2,296,269
Fixed Assets	68,482	62,336
Other Assets	7,278,767	7,414,605
Total Current Liabilities	<b>\$ 1,979,222</b>	<b>2,152,114</b>
Current Liabilities	464,368	822,522
Deferred Revenue	1,514,854	1,329,592
<b>Net Assets</b>	<b>\$ 7,725,841</b>	<b>7,621,096</b>
Unrestricted	6,440,009	6,281,356
Temporarily restricted	956,241	963,018
Permanently restricted	329,591	376,722
Liabilities & Net Assets	\$ 9,705,063	\$ 9,773,210

General Programs were originally budgeted for a slight (<2%) deficit in 2000 and the final net ended up being very close to budget. There was a 16% decline in meeting revenues from 1999 to 2000, directly traceable to a lower attendance at the meetings in Atlanta and Rochester than in the combination of Austin and Chicago in the previous year; this had been anticipated when the budget for 2000 was developed. The *Astrophysical Journal* (including *Supplements*) finished with a positive bottom line and outperformed the budget by a modest margin. The *Astronomical Journal* was intentionally budgeted for a loss in 2000, as a result of an excess balance in the reserve fund, and the actual loss was slightly larger than expected.

The fund-raising effort for the Second Century Fund tailed off somewhat in 2000 after a successful year in 1999. With the exception of a few major donations, fund raising from the membership was comparable to that in 1998. We were successful in raising sufficient funds to allow the Education Prize to be awarded for the first time in 2000.

**Table I** gives a comparative summary of activities and changeof net assets of the AAS for 1999 and 2000.

**Table II** contains a summary of the AAS Balance Sheet as of31 December 1999 and 31 December 2000.

## **Member Deaths Noted**

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

Arthur F. Davidsen Victor A. Hughes J. Lynn Miller Robert Neal Whitehurst

Deaths Noted Elsewhere: A. G. Walker (of the Robertson Walker metric)

#### **2001 Small Research Grants**

The AAS Small Research Grant Program is funded primarily by a grant from NASA, the National Aeronautical and Space Adminstration. The following received Small Research Grants in 2001 for the amounts shown and for the projects listed:

- Anatoly Miroshnichenko, "Multicolor Photometry of Early Type Stars with Circumstellar Envelopes," \$2,000;
- Frank Bensch, "The Formation Mechanisms and Abundance of Carbon in Cloud Cores & Outflows," \$1,750;
- Jennifer Birriel, "Raman Scattering in Planetary Nebulae," \$750;
- Steven Bloom, "Optically Identifying and Monitoring High Energy Gamma-Ray Sources," \$1,000;
- Rupali Chandar, "The Formation and Evolution of NGC 6822," \$550;
- Edward Colbert, "Observing at KECK II," \$2,370;
- Edward Colbert, "Multi-wavelength Phenomenology of Intermediate X-ray Objects," \$2,000;
- Christopher De Pree, "Ionized Gas Velocities of the Hyper compact H II Regions in W49," \$3,400;
- Richard Ditteon, "A Large Format CCD Camera for Asteroid Astrometry," \$5,000;
- Daniel Durda, "A High-altitude Search for Vulcanoids," \$2,400;
- Vikram Dwarkadas, "Hydrodynamics of Young Supernovae and its Implications for Radio Emission," \$1,500;
- Martin Guerrero, "Circumstellar Nebulae around Massive Stars," \$1,363;
- Paul Heckert, "Ongoing Studies of Short Period Eclipsing RS CVn Systems," \$3,300;
- Chuck Higgins, "Radio JOVE- Direct to the Classroom," \$5,000;
- Eric Hintz, "Undergraduate Monitoring of Pulsating Variable Stars," \$2,400;
- Elliott Horch, "Speckle Observations of Binary Stars from the Southern Hemisphere," \$4,000;
- Ray Jayawardhana, "Probing Planet Formation among nearby Young Stars," \$3,300;
- Jennifer Johnson, "CH Stars in Globular Clusters," \$5,000;
- Albert Linnell, "To purchase a workstation," \$2,000;
- Donald Lubowich, "The Interstellar D abundance, the Stellar Li Abundance, and the Solar B Abundance," \$4,000;
- Neal Miller, "Radio Studies of Cluster-Cluster Mergers," \$1,500;
- R. Nather, "Constraints on Nuclear Physics from White Dwarf Seismology," \$4,288;
- Douglas O'Neal, "To Further Understand Observational Manifestations of Magnetic Activity on Highly Active Stars," \$975;
- Jaehyon Rhee, "A New Search for Cooler, Extremely Metal-Deficient Stars," \$2,900;
- Mikhail Sachkov, "Structure and Kinematics of the Galaxy, Distance Scale, Dynamics of Stellar Systems, Star Clusters," \$1,500;
- Ronald Samec, "Toward a Small Undergraduate Research Observatory," \$5,000;
- Timothy Sasseen, "Linking Education and Research Efforts at UC Santa Barbara Using the RAAP System," \$4,800;
- Keivan Stassun, "Travel to CTIO to Obtain Precise Light Curves of Newly Discovered Pre-main Sequence Eclipsing Binary," \$1,900;
- Dirk Terrell, "Travel Support to Lead a Workshop on Binary Star Data Analysis for Amateur Astronomers," \$1,000;
- David Thilker, "Observations of Nearby Spiral Galaxies," \$5,000;
- David Turner, "Archival Information on Cepheid Period Changes, II," \$5,000;
- Richard Wasatonic, "Photometric Determination of Variations of Radius, Temperature, and Luminosity of Pulsating Red Giant," \$3,350;
- Alan Whiting, "To Continue a Visual Search for Local Group Dwarf Galaxies in the Northern Hemisphere," \$2,882;
- Robert Willson, "Collaborative VLA-SOHO-HESSI Investigations of Solar Microflares," \$4,000;
- Linda Winkler, "Construction of a Spectrometer for the Study of the Ae Stars," \$975.

## **EDUCATION**

Bruce Partridge, Education Officer and Grant PI

## Our Goals in "Astro 101"

"Astro 101," the introductory course or courses intended for non-majors, is taken by roughly 200,000 US undergraduates each year. For many students (including those who will go on to be K-12 teachers), "Astro 101" may be their only college science course. For many departments, "Astro 101" is their major educational commitment. In this context, what are appropriate goals for such a course?

In May and June, department leaders from 30 research universities met to discuss goals for "Astro 101" at two workshops hosted by Berkeley and the Center for Astrophysics, respectively. These workshops were sponsored by the AAS and funded by NSF's Division of Undergraduate Education. The participants heard brief presentations by experts in science pedagogy and by astronomers working to reform "Astro101" (including Bob Mathieu, Eric Mazur, Dick McCray, Liane Pedersen-Gallegos, Elaine Seymour and Sheila Tobias). The department leaders then drew up lists of goals for "Astro 101," strategies to meet the goals, and recommendations to individual professors, departments, the astronomical community and funding agencies. The goals are quite general, and are not intended to lay down a standard curriculum for survey courses in astronomy. The participants were strongly encouraged to continue discussions of "Astro 101" and our hopes for it in their home departments.

There will be a panel discussion of the workshops at the January AAS winter meeting on Tuesday, 8 January 2002 from 10-11:30am.

In addition, a report summarizing these two meetings is in preparation. The printed report will be widely disseminated to the astronomical community (with publication planned in the *Bulletin of the AAS*), to text book writers and editors, and to funding agencies. We are considering how to extend these discussions to institutions not represented at the two workshops and to instructors of "Astro 101" who are not members of the Society.

## **AAS-ASP-IAPPP** Astronomy Scholarships

#### Terry Oswalt, Florida Institute of Technology

Three high school students, **Sabrina Curie Snell** and the team of **Michael Barynov** and **Aliakei Akulionak**, were presented with the 2001 Priscilla and Bart Bok Awards by the American Astronomical Society (AAS) and Astronomical Society of the Pacific (ASP). Their outstanding astronomical research projects were exhibited at the 52<sup>nd</sup> annual Intel International Science and Engineering Fair (ISEF), held in San Jose, California during 8-11 May 2001.

Snell, a 15-year-old from the *School Without Walls in Washington, DC*, won the AAS-ASP Bok Award and a \$5000 scholarship for her project "The Optical Divide." Snell did a statistical study of Hipparcos and Tycho-2 data to quantify differences in binary star motions as compared with those recorded in the U.S. Naval Observatory's Washington Double Star Catalog. Snell's teacher/sponsor was **Kareem Monib**.

Barynov, 18, and his partner Akulionak, 16, both from *Lyceum* #2 *High School, in Minsk, Belarus*, won the AAS-ASP Bok Second Place Award and a \$3000 scholarship for their project

"Improved System of Radio Observations of Meteors." Barynov and Akulionak devised a model for the reflection of radio waves off the ionization trails of meteors. Their work allows constraints to be set on a meteor's speed, mass and original orbit using reflected commercial radio station signals. The team's teacher/sponsor was Vladimir Bahamolav.

The AAS-ASP judging team consisted of Drs. **Terry Oswalt** of the Florida Institute of Technology, **Michael Kaufman** of San Jose State University, and **Suzanne Chippindale**, Education Coordinator for the ASP\_Oswalt

ASP. Oswalt presented the Bok Awards on behalf of the AAS and ASP during the Special Awards ceremonies, held at the San Jose Convention Center on Thursday evening, 10 May.



The team of Michael Barynov (shown here) and Aliakei Akulionak, of the Lyceum #2 High School, in Minsk, Belarus, won second place for the 2001 Priscilla and Bart Bok Awards.



Oswalt, Kaufman and Chippindale also served as judges for the

Bradley Bunnell, from Carbon High School in Price, Utah, won the Lines Award for his measurements the spectroscopic variations throughout the 5-day cycle.

Richard D. Lines Special Award in Astronomy, presented annually at the ISEF by the International Amateur-Professional Photoelectric Photometry (IAPPP). Oswalt presented the Lines Award and a \$5000 scholarship to **Bradley Bunnell**, a 15-year-old student from *Carbon High School in Price, Utah.* Bunnell's winning project was "Spectral Variations in Cepheid



The "joint was jumpin" at the San Jose McEnery Convention Center in San Jose, California this May when the 52nd Annual Intel International Science and Engineering Fair convened.

Variable Stars, Phase II." Using data collected with a small telescope and homemade spectrograph, Bunnell measured the spectroscopic variations throughout the 5-day cycle of the prototype pulsating star delta Cephei and compared them to two similar variables, eta Aquilae and zeta Geminorum. Bunnell's teacher/sponsor was <b>Dan Taylor</b> . All four award-winning students have been invited to publish papers describing their projects in the <i>IAPPP Communications</i> , an international journal specializing in collaborative astronomy research projects involving students, amateurs and professional astronomers. In addition, the high school science departments of each student will receive \$1000. The scholarships and science department contributions are provided by a grant from	the National Science Foundation, administered by the AAS on behalf of the three participating organizations. Science Service, publisher of the weekly <i>Science News</i> , hosts the annual ISEF. More than 1000 Finalists reached the ISEF this year from over 5 million students in grades 9-12 who competed in nearly 500 ISEF-affiliated fairs held in the 50 United States and more than 40 nations. ISEF Finalists vie for over \$2 million in gifts, cash and scholarship prizes. In addition, the top two grand award winners of the ISEF are guests at the annual Nobel Prize award ceremonies in Sweden. The AAS, ASP and IAPPP have co-sponsored special awards in astronomy at the annual ISEF since 1991.	
→FORM	FORM	
<b>2002 AAS Prize N</b> Please read the full descriptions of the AAS prizes and awards at 1 2001 AAS Membership Directory. All nominations are due by 1 I wish to nominate (Name) of (Institution)	<b>Somination Form</b> http://www.aas.org/ or abbreviated information on page 11 of the <b>October 2001</b> .	
for the following prize (check one):		
Russell Lectureship: Warner Prize: Pier	ce Prize Heineman Prize Van Riesbroeck Prize	
Education Prize: Tinsley Prize We	ber Award	
Please send to the <i>Prize Chair</i> (below) a letter with this form stati	ng upon which major scientific achievements you base your	
belief that this person is a suitable candidate for the prize. Enclos	e 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 to be sent to the Chair.

Print Your Name	_Signature
Phone Number	_Email Address

Return this form to the appropriate prize committee chair by 1 October 2001:

#### Warner/Pierce Prize

Geoffrey C. Clayton Louisiana State University Dept. of Phys. & Astronomy Baton Rouge, LA 70803-4001 Tel: 225-578-8275 FAX: 225-578-5855 gclayton@fenway.phys.lsu.edu

#### **Beatrice M. Tinsley Prize**

Sidney Wolff NOAO PO Box 26732 Tucson, AZ 85726-6732 Tel: 520-318-8281 FAX: 520-318-8170 swolff@noao.edu

#### Henry N. Russell Lecture

Paul W. Hodge University of Washington Department of Astronomy Box 351580 Seattle, WA 98195-1580 Tel: 206-543-6307 FAX: 206-685-0403 hodge@astro.washington.edu

#### **Dannie Heineman Prize**

David N. Spergel Princeton University Obs. Peyton Hall Princeton, NJ 08544-0001 Tel: 609-258-3589 FAX: 609-258-1020 dns@astro.princeton.edu

#### **Education Prize**

Harry L. Shipman University of Delaware Dept. of Phys. & Astronomy Sharp Laboratory Newark, DE 19716-2570 Tel: 302-831-2986 FAX: 302-831-1637 harrys@strauss.udel.edu

#### Joseph Weber Award

Joseph S. Miller University of California Lick Observatory Santa Cruz, CA 95064 Tel: 831-459-2991 FAX: 831-459-5244 miller@ucolick.org

#### Van Biesbroeck Prize

Richard G. Kron Yerkes Observatory 373 W. Geneva St. Williams Bay, WI 53191 Tel: 414-245-5555 FAX: 414-245-9805 rich@oddjob.uchicago.edu



Michael Werner (JPL) gave an invited talk on SIRTF's first year.



John Bochanski (Villanova U.) claimed that "The Mystery Companion of Mira" has been uncovered.



Charles Telesco (U. Florida) summarized early mid-infrared highlights from a mid-IR imager/spectrometer at the Gemini North telescope.

## **PICTURES FROM PASADENA**

Here are scenes from the 198<sup>th</sup> meeting of the AAS, held in Pasadena, California on 3-7 June. As all or most of the 1381 attendees can attest, events ran smoothly, thanks in no small measure to the efforts of the local organizing committee, led by **Charles Beichman** of JPL. Each picture is an AAS photograph by Richard Dreiser, copyright 2001 American Astronomical Society.



Scott Sandford (NASA Ames), an investigator of organic molecules, received the award for submitting the earliest meeting abstract from AAS Meeting Organizer Diana Alexander.



New results on starburst galaxies were presented by (left to right) Nicholas Scoville (Caltech), Jean Turner (UCLA), and Armando Gil de Paz (IPAC).



Benning Wentworth (left, Colorado School for the Deaf and Blind), Noreen Grice, and Bernhard Beck-Winchatz, (right, DePaul U.) participated in a press conference on Grice's new book of Hubble images for the blind.



Reporting on intermediate luminosity X-ray objects, presumed to be intermediate-mass black holes, were (left to right) Kimberly Weaver (NASA's GSFC), Giuseppina Fabbiano and Andreas Zezas (both, Center for Astrophysics), Andrew Ptak (Carnegie Mellon U.), and Edward Colbert (Johns Hopkins U.).



Alan Title (Lockheed Martin Institute for Space Research) received the Hale Prize from Solar Physics Division Chair John Leibacher.



*Lynne Hillenbrand (Caltech) presented an invited talk on nearby young stars and star clusters.* 



Harold McAlister (Georgia State U.) spoke on science with the CHARA array at the meeting and on a night-time press tour of Mt. Wilson Observatory.



John Bally (left, U. Colorado) discussed hazards to planet formation, while Michael Jura and Christine Chen (center, both, UCLA) presented evidence for a possible massive asteroid belt around HR 1998. Mark Sykes (right, U. Arizona) commented on both reports.



Among those presenting early scientific results from the Sloan Digital Sky Survey were (left-to-right) Alex Szalay, (Johns Hopkins U.), Donald York (U. Chicago), and Donald Schneider (Pennsylvania State U.).



Megan Urry (left, Chair, Committee on the Status of Women in Astronomy) greeted Debra Rolison (Naval Research Lab.) who spoke on the need for women faculty in science and engineering departments.



Frank Drake (SETI Institute) received the 2001 Education Prize from AAS President Anneila Sargent.



Tarsh Freeman (Bevill State College) described Hubble observations of star formation in the inner resonance ring of NGC 3081.



Michael Pierce (Indiana U.) investigated large-scale flows in the local universe.



Patricia Boyd (UMBC/NASA GSFC) proposed a unified physical model for disk disruptions and X-ray intensity excursions in Cyg X-2, LMC X-3 and Cyg X-3.



Farhad Yusef-Zadeh (Northwestern U.) described Chandra observations of the Arches cluster near the galactic center.

## **ABOUT MEETINGS**

### Your Comments on Site Selection and Meetings

The AAS staff thanks everyone who responded to the survey regarding the joint meeting with the American Association of Physics Teachers in San Diego. As this was our first attempt at a joint meeting, your comments are especially valuable for planning future meetings. Your suggestions regarding program planning, organization, advertising, and scheduling will be incorporated into creating an important experience for all attendees.

#### How Meeting Sites Are Chosen

It is unlikely that many AAS members appreciate the factors involved in choosing meeting sites. As our meetings continue to grow, planning for and locating sufficient meeting and exhibit space is always a challenge. We are particularly sensitive to the overall cost of the meeting including both the cost to the Society (meeting space rental, audio visual support, exhibit hall decorator, and catering) and the cost to registrants (primarily hotel room rates and meeting registration fees).

There has to be a delicate balance between the quality and the cost of the hotels and meeting facilities. For example, although holding last January's meeting in downtown San Diego would have provided more elegant meeting space and more luxurious hotels, the hotel room rates would have been at least \$100 more each night and we would have had to charge more for registration. We were concerned that these extra costs might adversely affect attendance. For other locations, the time of year is a big factor and many cities are virtually unaffordable in prime season, *e.g.* Washington, DC in the springtime.

#### Space Problems in San Diego

We are acutely aware of the problems with the exhibit and poster space that occurred at the San Diego meeting. As this was our first joint meeting, we were unable accurately to estimate the attendance; the AAPT and AAS combined registration was approximately 500 (15%) more people than we had expected. If we hold a joint meeting again, we will be especially alert to this possibility.

#### The Importance of Staying in the Advertised Hotel

The AAS contracts a block of rooms at the conference hotel and assumes a financial liability for any and all rooms in that block that are not reserved. Costs incurred from low guest room reservations will result in higher registration fees. In addition, hotels provide free meeting space if a certain percentage of those blocked rooms are reserved by our meeting registrants.

#### Supporting Spring Meetings

Support from a local host, usually a single department or the collaboration of several departments in the same geographical region, remains essential for spring meetings. Please contact the Executive Office if there is interest in hosting a spring meeting. The next available year for this meeting is 2006, and we hope to identify a host by June 2002.

#### **Topical Session Proposals Due 15 November**

Proposals for Topical Sessions for the June 2002 AAS Meeting in Albuquerque, NM are due in the Executive Office by **15 November 2001**. Proposals should be sent to diana@aas.org. Please read Topical Session guidelines at http://www.aas.org/meetings/topguide.html

## Special vs. Topical Sessions: What's the Difference?

#### **Special Sessions**

When:	Winter and Spring meetings
Length:	One and one half hours; will be scheduled at the same time as other oral sessions
Format:	Invited, contributed papers, or a combination of the two
Proposal	Content:
1	Strong justification for topic, speakers
Proposal	s Due to Executive Office: For winter meeting: early May; For spring meeting: early December
Topical S	Sessions:
When:	Spring Meetings only; Tuesdays and Wednesdays
T .1	$\frac{1}{10} = \frac{1}{10} + \frac{1}{10} $

Length:	Half day (3 $\frac{1}{4}$ hours) or Full day (6 $\frac{1}{2}$ hours)
Format:	Invited speakers, invited posters, invited debates, or other innovative structure; only three topical cassions will be scheduled at the same time
	sessions will be scheduled at the same time
Proposal (	Content:
	Strong justification for the general theme,
	description of format, list of speakers and

Proposals Due to Executive Office: 15 November.

## **APPOINTMENTS**

sub-topics

#### **Ormes to Head GSFC Space Sciences**

Dr. Jonathan F. Ormes has been named the new Director of Space Sciences at NASA's Goddard Space Flight Center in Greenbelt, Md. In his new position, Ormes will be responsible for planning, organizing and evaluating a broad program of scientific research, both theoretical and experimental, in the study of space sciences. The program ranges from basic research to flight experiment development, to mission operations and data analysis.

Ormes was Head of the Nuclear Astrophysics Branch at Goddard from 1982 until 1990. In 1983, he took a year away from these duties to be the Acting Head of High Energy Astrophysics at NASA Headquarters from 1983-1984 and was awarded the NASA Exceptional Service Award for his efforts in that capacity. In 1990, he was appointed to the Senior Executive Service and assumed the job of Chief of the Laboratory for High Energy Astrophysics, serving in that capacity for 10 years. **PUBLISHING NEWS** Continued from page 1

#### New ApJ Letters Editor Sought

The American Astronomical Society is soliciting applications and nominations of candidates to assume the position of Editor of the *Astrophysical Journal Letters* when the current Editor retires at the end of 2002. The *Letters* office receives more than 1000 short papers each year and works closely with the Tucson Editorial Office of the main *Astrophysical Journal (ApJ)* and the University of Chicago Press to process and publish the most important astronomical discoveries and ideas of our time.

The Society seeks an individual with stature and achievement in the field of astronomy and with a reputation for fairness, honesty, and consistency. The Editor will be expected to manage an office of clerical and technical staff and to be able to work with the Society, the Editor in Chief of the ApJ, and the University of Chicago Press on the management and production of the journal. Previous editorial experience is an asset, but not required.

The Editor of the ApJ Letters receives manuscripts for publication, assures their brevity and conciseness, assigns them to referees and tracks the refereeing process for timeliness and fairness, makes judgments on the suitability of manuscripts for publication based on the referee's reports and on the authors' revisions, and submits the accepted papers to the publisher. The Editor is also required to report on the state of the Journal at AAS Council and Publications Board meetings. While the overall operation and editorial standards of the ApJ are the responsibility of the Editor-in-Chief, who is currently Dr. Robert Kennicutt, the ApJ Letters editor operates independently in accepting or declining letters to the *Journal* and in setting the requirements for style and length. A comprehensive web-based manuscript submission and tracking tool will be in place by the time this position begins. Confidentiality of all reports and communications is of the highest importance.

The AAS expects to compensate the Editor at roughly a half-time level and will negotiate the level of effort for other staff with the successful candidate. The current operating structure includes an Editor and a Deputy as well as a small group of Associate Editors who advise the Editor regarding special cases. Managerial and clerical support is provided by a small staff at the Editor's location and additional support is provided by staff at the University of Chicago Press.

Candidates for this position should submit a cover letter, CV, and bibliography to Bruce Elmegreen, *Chair, ApJ Letters* Search Committee, IBM Watson Research Center, PO Box 218, Route 134, Yorktown Hts., NY 10598, bge@watson.ibm.com. Nominations for the position may also be sent to the same address.

Selected candidates will be asked to provide evidence of institutional support for their taking on editorial responsibilities and the associated infrastructure requirements (support staff, office space, Internet connections, etc.). If information relevant to such support is known, candidates are encouraged to mention this in their cover letters. The cover letter should also include plans for running the *ApJ Letters* office, including requirement for support personnel and assistant editors, if desired.

In accordance with the *Bylaws* of the Society, the Search Committee will make its recommendations to the AAS Publications Board and AAS Council. The final selection will be made by the Council. Applications and nominations received before **12 October 2001** will be given full consideration.

The AAS is an equal opportunity employer. Women and minorities are encouraged to apply.

#### Announcing Seven New Scientific Editors for ApJ Rob Kennicutt, Editor-in-Chief

At its June meeting in Pasadena the AAS Council approved the appointments of seven new Scientific Editors for the *Astrophysical Journal*. These new editors were selected from an outstanding pool of applicants following a 6-month search process. Five of the new editors will begin their terms in January of 2002:

• W. Butler Burton, Professor of Astronomy, College of William & Mary and Leiden University;

• **Katia Ferriere**, Staff Astronomer at the Observatoire Midi-Pyrenees at Toulouse. (She will be the first *ApJ* editor to be based at a European institution.);

• Susan Simkin, Professor of Astronomy at Michigan State University (and currently on leave to serve as Program Director for Extragalactic Astronomy and Cosmology at the NSF);

• Joseph Shields, Associate Professor in the Department of Physics and Astronomy at Ohio University; and

• Linda Sparke, Professor and Chair of the Department of Astronomy at the University of Wisconsin at Madison.

Two other editors will begin their terms in January 2003:

• **Judy Pipher**, Professor in the Department of Physics and Astronomy at the University of Rochester; and

• **Paula Szkody**, Professor of Astronomy at the University of Washington.

These editors will be filling positions left by five *ApJ* Scientific Editors whose terms will be expiring at the end of the year: **Gregory Bothun, Geoffrey Burbidge, Edward Sion, Floyd Stecker**, and **Steve Willner**. The AAS extends its heartfelt thanks to these individuals for their unselfish service to the *ApJ* and the Society.

### Manuscript Submissions using AASTeX

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

#### **AASTeX Homepage:**

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

**User Support:** 

aastex-help@aas.org

#### **Journal Homepages:**

- AJ: http://www.journals.uchicago.edu/AJ/
- ApJ: http://www.journals.uchicago.edu/ApJ/
- *ApJL*: http://cfa-www.harvard.edu/apjl

## CALENDAR

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

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

#### **AAS and AAS Division Meetings**

\*Division for Planetary Sciences 27 November–1 December 2001 — New Orleans, LA Contact: Alan Stern (astern@boulder.swri.edu) http://www.boulder.swri.edu/dps01/

199<sup>th</sup> Meeting of the AAS
6–10 January 2002 — Washington, DC
Contact: AAS Executive Office (aas@aas.org)

High Energy Astrophysics Division (with Division of Astrophysics of APS) 20–23 April 2002 — Albuquerque, NM

Contact: Alice Harding (harding@twinkie.gsfc.nasa.gov) 200<sup>th</sup> Meeting of the AAS 2–6 June 2002 — Albuquerque, NM Contact: Harjit Ahluwalia (hsa@unm.edu)

201<sup>st</sup> Meeting of the AAS 5–9 January 2003 — Seattle, WA Contact: Diana Alexander (diana@aas.org)

#### **Other Events**

ISSS-6: The 6<sup>th</sup> Int'l Sch./Symp. Space Plasma Simulations 3–8 September 2001 — Garching, Germany Contact: Jörg Büchner (buechner@linmpi.mpg.de) http://www.copernicus.org/ISSS-6

Two Years of Science with Chandra 5–7 September 2001 — Washington, DC Contact: Harvey Tananbaum (ht@cfa.harvard.edu) http://asc.harvard.edu/symposium\_2001.html

\*2001 AMOS Technical Conference 10–14 September 2001 — Maui, Hawai'i Contact: Lori Bragg (amostech@maui.com) http://ulua.mhpcc.af.mil/AMOS2001

\*NASA OSS: Education and Public Outreach Conference 12–14 September 2001 — Chicago, IL Contact: Victoria Simek (vsimek@wppost.depaul.edu) http://analyzer.depaul.edu/ossconference

\*Low Z at Low z and High z: Early Chemical Evolution 13–15 September 2001 — Minneapolis, MN Contact: Jenny Curtis (lowz@physics.umn.edu) http://www.tpi.umn.edu/lowz.html

Yohkoh 10<sup>th</sup> Anniversary Meeting: "Multi-Wavelength Observations of Coronal Structure and Dynamics" 17–20 September 2001 — Kailua-Kona, HI Contact: Piet Martens (martens@mithra.physics.montana.edu) http://solar.physics.montana.edu/y10/ 21<sup>st</sup> Sac Peak Workshop: "Current theoretical models and future high resolution solar observations: preparing for ATST."

17–21 September 2001 — Sunspot, NM Contact: Alexei Pevtsov (ws21@sunspot.noao.edu) http://www.sunspot.noao.edu/INFO/MISC/WORKSHOPS/index.html

IAU X<sup>th</sup> Latin-American Regional Meeting of Astronomy 17–21 September 2001 — Cordoba, Argentina Contact: Carlos Donzelli (xrrla@oac.uncor.edu) http://axp2.oac.uncor.edu/~xrrla/index.html

\*The Physics of Compact Objects 19–21 September 2001 — Bologna, Italy Contact: Mauro Orlandini (orlandini@tesre.bo.cnr.it) http://www.tesre.bo.cnr.it/cnoc/

International Meteor Conference 20–23 September 2001 — Cerkno, Slovenia Contact: Ina Rendtel (treasurer@imo.net) http://www.imo.net/news.imc.html

\*Joint Atlantic Seminar in the History of the Physical Sciences: Historical Interactions Between the Physical Sciences, Business and Technology 28, 20 Sentember 2001 — Philadelphia, PA

28–30 September 2001 — Philadelphia, PA Contact: Thomas C. Lassman (toml@chemheritage.org) http://www.chemheritage.org/HistoricalServices/2001jashps.html

\*Frontiers in Particle Astrophysics and Cosmology, a EuroConference on Neutrinos in the Universe 29 September–4 October 2001 — Lenggries, Germany Contact: Rhona Heywood (rheywood@esf.org) http://www.esf.org/euresco/01/pc01142a.htm

\*Perspectives in Astrobiology 29 September–10 October 2001 — Chania, Crete Contact: Ron Koczor (ron.koczor@msfc.nasa.gov) http://natoasi.msfc.nasa.gov

Astronom. Data Analysis Software and Systems (ADASS) XI 30 September–3 October 2001 — Victoria, BC, Canada Contact: Daniel Durand (adass@hia.nrc.ca) http://cadcwww.hia.nrc.ca/adass\_2001

#### \*AAS SECOND CENTURY LECTURE

"Einstein's Biggest Blunder? The Case for Cosmic 'Antigravity'" Lecture by Alex Filippenko 2 October 2001 — Fresno, CA http://physics.csufresno.edu/doug/collo.html

#### \*AAS SECOND CENTURY LECTURE

"Extrasolar Planets: First Reconnaissance" Lecture by Paul Butler 12 October 2001 — Victoria, BC, Canada http://www.astro.uvic.ca

\*Vth International Conference on Gravitation and Astrophysics of Asian-Pacific Countries (ICGA-2001) 1–7 October 2001 — Moscow, Russian Federation

Contact: M. Yu. Konstantinov (icga@rgs.phys.msu.su) http://www.homepage.techno.ru/rgs

Seeing Through the Dust: The Detection of HI and the Exploration of the ISM in Galaxies 20–26 October 2001 — Penticon, BC, Canada Contact: hi50@drao.nrc.ca http://www.drao.nrc.ca/~kerton/hi50.html

IEEE 2001 Nuclear Science Symp. & Medical Imaging Conf. 4–10 November 2001 — San Diego, CA Contact: Anthony Lavietes (lavietes1@llnl.gov) http://www.nss-mic.org Gamma Ray Burst and Afterglow Astronomy 5-9 November 2001 — Woods Hole, MA Contact: George Ricker (grr@space.mit.edu) Disks of Galaxies: Kinematics, Dynamics and Perturbations 5–9 November 2001 — Puebla, Mexico Contact: Rosario Sanchez (secregh@inaoep.mx) http://www.inaoep.mx/~disks01/ghconf.html \*Tech. for the Detect. of Planets and Life Beyond theSolar System 7–8 November 2001 — Edinburgh, UK Contact: Bill Dent (dent@roe.ac.uk) http://www.roe.ac.uk/atc/research/workshop.html IAU Symp. No. 209: "Planetary Nebulae: Their Evolution and Role in the Universe" 19-23 November 2001 — Canberra, Australia Contact: Maartje Sevenster(pn\_symp@mso.anu.edu.au) http://www.mso.anu.edu.au/~pn\_symp/ Workshop: X-ray Spectroscopy of Active Galactic Nuclei with Chandra and XMM-Newton 3-6 December 2001 — Garching, Germany Contact: Thomas Boller (bol@xray.mpe.mpg.de) http://wave.xray.mpe.mpg.de/conferences/agnspec-workshop \*Galaxies: The Third Dimension 3–7 December 2001 — Cozumel, Mexico Contact: Margarita Rosado (3dgal@astroscu.unam.mx) http://www.astroscu.unam.mx/3Dgal "Galaxies: Mind Over Matter," A Celeb. Symp. for Vera Rubin 10-11 January 2002 - Washington, DC Contact: Sharon Bassin (sbassin@pst.ciw.edu) http://www.carnegieinstitution.org/rubinsymposium.html \*Solar Magnetism and Related Astrophysics 16-18 January 2002 - Santa Barbara, CA Contact: Dorene Iverson (dorene@itp.ucsb.edu) http://www.itp.ucsb.edu/conference/future conf.html \*IAU Coll. 186: "Cometary Science after Hale-Bopp" 21-25 January 2002 - Tenerife, Canary Islands, Spain Contact: Rita Schulz (Rita.Schulz@esa.int) 33rd Lunar and Planetary Science Conference 4–8 March 2002 — Houston, TX Contact: Cheryl Perry (perry@lpi.usra.edu) \*IAU Coll. 187: "Exotic Stars as Challenges to Evolution" 4-8 March 2002 — Miami Beach, FL Contact: Robert E. Wilson (wilson@astro.ufl.edu) \*International Conference on Light Pollution 5-7 March 2002 — La Serena, Chile Contact: light@ctio.noao.edu http://www.iau.org/IAU/News \*International Conference on Women in Physics 7-9 March 2002 — Paris, France Contact: Judy Franz (beamon@aps.org) http://www.if.ufrgs.br/~barbosa/conference.html \*SOHO-11: From Solar Min to Max: Half a Solar Cycle with SOHO 11-15 March 2002 — Davos, Switzerland Contact: admin@pmodwrc.ch http://www.pmodwrc.ch/conferences/conferences.html 2nd Astrobiology Science Conference 7-11 April 2002 — Moffett Field, CA Contact: abscicon@mail.arc.nasa.gov

http://astrobiology.arc.nasa.gov/conferences/2001/ABSciConf/index.html

\*Galaxy Evolution: Theory and Observations 8-12 April 2002 — Cozumel, Mexico Contact: Vladimir Avila-Reese (galaxies@astroscu.unam.mx) http://www.astroscu.unam.mx/galaxies \*IAU Symp. 211: "Brown Dwarfs" 20-24 May 2002 - Kona, HI Contact: Eduardo Martin (ege@ifa.hawaii.edu) \*Origins 2002 26-29 May 2002 — Jackson Hole, WY Contact: Eric Smith (Eric.P.Smith.1@gsfc.nasa.gov) AAS SECOND CENTURY LECTURE "Extrasolar Planets: First Reconnaissance" Lecture by Paul Butler 8 June 2002 — Topeka, KS Contact: Brenda Culbertson (zzbculbe@washburn.edu) \*Festschrift for R.F. Garrison on his 66th Birthday, "Probing the Personalities of Stars and Galaxies" 10–11 June 2002 — Tucson, AZ Contact: Richard O. Gray (grayro@appstate.edu) http://stellar.phys.appstate.edu/garrison IAU Symp. 210, "Modeling of Stellar Atmospheres" 17–21 June 2002 — Uppsala, Sweden Contact: Nikolai Piskunov (piskunov@astro.uu.se) http://www.astro.uu.se/iau210 \*IAU Symp. 212, "A Massive Space Odyssey, from Main Sequence to Supernova" 24-28 June 2002 — Lanzarote, Canary Islands, Spain Contact: Karel van der Hucht (K.A.van.der.Hucht@SRON.nl) \*IAU: 8th Asia-Pacific Regional Meeting 2-5 July 2002 — Tokyo, Japan Contact: Satoru Ikeuchi (ikeuchi@a.phys.nagoya-u.ac.jp) \*IAU Symp. 213: "Bioastronomy 2002: Life among the Stars" 8-12 July 2002 - Great Barrier Reef, Australia Contact: Ray P. Norris (Ray.Norris@atnf.csiro.au) \*2002 Pacific Rim Conference on Stellar Astrophysics 11-17 July 2002 — Xi'an, China Contact: Zhigang Li (lizg@ms.sxso.ac.cn) http://bohr.physics.hku.hk/~xian2002 \*IAU Symp. 214: "High Energy Processes, Phenomena in Astrophys." 5-10 August 2002 - Suzhou, China Contact: Virginia Trimble (vtrimble@astro.umd.edu) \*IAU Coll. 189: Astrophysical Tides: The effects in the Solar and Exoplanetary Systems 16-20 September 2002 - Nanjing, China Contact: Iwan Williams (i.p.williams@gmw.ac.uk) \*34th COSPAR Scientific Assembly/World Space Congress 10-19 October 2002 — Houston, TX Contact: cospar@copernicus.org http://www.copernicus.org/COSPAR/COSPAR.html \*IAU Symp. 215: "Stellar Rotation" 8–12 November 2002 — Cancun, Mexico Contact: André Maeder (andre.maeder@obs.unige.ch) \*IAU Coll. 190: "Magnetic Cataclysmic Variables, MCV3" 8-13 December 2002 — Cape Town, South Africa Contact: Sonja Vrielmann (sonja@pinguin.ast.uct.ac.za) XXV<sup>th</sup> International Astronomical Union General Assembly

13–26 July 2003 — Sydney, Australia Contact: IAU Secretariat (iau@iap.fr) 13



#### Meeting with AGU in Boston

Steve Walton, Secretary. Except as noted otherwise, photos by Steve Walton.

The 2001 meeting of the Solar Physics Division (SPD) was held jointly with the American Geophysical Union (AGU) from 29 May through 2 June 2001 in Boston, Massachusetts. Much of the meeting was organized around special sessions devoted to particular research topics, and what follows is a highly personal view of those sessions. Any misrepresentations of the science are entirely my doing, and readers are encouraged to check the original papers!

Peter Foukal organized a special session on Wednesday morning devoted to solar irradiance variations. For the uninitiated, the "total solar irradiance" is what we now call what used to be the "solar constant" until we found out it wasn't. Henk Spruit (Max Planck Institute for Astrophysics) came from Germany to give an invited talk on the theory of luminosity variations, and drew a wonderful analogy between the solar convection zone with a sunspot embedded in it and an aluminum spacecraft with a small patch of thermal blanket on its surface; the point is that changes in the emissivity of a small part of the photosphere are rapidly communicated to the rest of the Sun, resulting in a very small increase in temperature of the rest of its surface and, therefore in his view, no change in luminosity. Judith Lean (Naval Research Laboratory) outlined the current state of models for solar irradiance variations, which she showed can explain the observations with a two-source model, namely sunspots and faculae, which fit the measurements quite nicely. Peter Foukal (CRI Inc.) then followed with his models of the effects of sunspots on the convection zone. However, a dissenting voice was raised by Jeff Kuhn (University of Hawaii), who pointed out that the highly non-isotropic nature of heat transport in the solar convection zone meant all these ideas were problematic. There remains much work to be done in this field, particularly in our understanding of the changes in the spectral irradiance.



#### CASS/UCSD 2000/07/14 02

A single frame from an animated reconstruction of a coronal mass ejection, produced by the Center for Astrophysics and Space Science, UCSD. *Special Sessions:* There were special sessions on coronal mass ejections (CMEs) every day of the meeting. This may be the most exciting part of solar physics at the present time. A flotilla of spacecraft such as SOHO, TRACE, and ACE are monitoring the sun constantly from photosphere to solar wind with both imaging and in situ measurements.

*Coronal Mass Ejections:* There were three Special Sessions devoted to Coronal Mass Ejections. The sessions were: "Physics of CMEs: Comparison of Theory and Observations" organized by **T. Zurbuchen** *et al.*, "Are There Two Classes of Coronal Mass Ejections?" organized by **P. Riley** and **H. Cane**, and "Tracking CMEs From the Sun Into the Heliosphere" organized by **D. Webb** *et al.* Each session hosted both oral and poster presentations and all the sessions were well attended and engendered lively discussion.

These sessions grew directly from topical challenges developed at the 2000 Meeting of SHINE, a grass roots organization devoted to understanding the solar and heliospheric aspects of space weather. The "Physics of CMEs" AGU session dealt with recent solar and in situ data that helps to constrain models of CMEs and on theoretical and numerical methods which provide tests and comparisons with observations. This was the largest of the three sessions, with 35 papers. The first oral session included discussions of theoretical models of the magnetic flux rope topologies of CMEs, highlighting a controversy about whether flux ropes can emerge fully formed through the photosphere and whether they develop before or are a result of the eruptive event. The other oral sessions emphasized SOHO, TRACE and Yohkoh observations of CME origins and development near the Sun, including recent UVCS diagnostic data on CME shocks, void regions and prominences and EIT observations



Jack Harvey (National Solar Observatory, left) and Dick Canfield (Montana State University, right) discussed solar magnetic fields and helioseismology.



A group of happy solar astronomers discussing the vast array of posters in the Great Hall.



Last year's SPD Studentship winner Susan Lepri (University of Michigan) discusses her poster, "Ion Charge State Distributions as an Identifier of Interplanetary CMEs" with Joan Burkepile (UCAR).

comparing coronal waves with coronal shocks, flares and CMEs.

Related to the Physics of CMEs session but with more emphasis on comparisons of CMEs structures observed near the Sun with in situ

observations in the heliosphere, the "Tracking CMEs From the Sun Into the Heliosphere" session consisted of full-day oral and poster sessions with a total of 33 papers. The presentations ranged over many topics, highlighted by the tracking of CMEs using radio waves, energetic electrons and enhanced helium abundances, energetic particles and shocks as signatures of CMEs, composition and charge state diagnostics of CMEs detected in situ, and using 2



Alan Title (Stanford Lockheed Institute for Space Research, Lockheed Martin Advanced Technology Center) shows off the tee-shirt announcing his 2001 Hale Prize.



Part of the revolution in solar physics: Two unidentified students discuss magnetograms with the help of a powerful laptop computer.



Students from the University of Memphis discuss the coronal heating problem. (Left to right) Jonathan Cirtain (Studentship winner), Joan Schmelz (faculty sponsor), undergraduates Drew Medlin and Thomas Blevins, with Joe Gurman (NASA/GSFC).

and 3D MHD simulations and tomography to model the propagation of CMEs in the inner heliosphere. The "Two Classes of CMEs?" session involved whether there are two intrinsic classes of CMEs based largely on their kinematical characteristics, namely fast, flare-related events which show constant speed over chronograph fields of view and slower, prominence-related events which clearly accelerate. The popularity of this topic resulted in overflow attendance at the single oral session! There was observational evidence from the LASCO and SMM coronagraphs and X-ray, radio and in situ plasma, IMF and particle data and theoretical expectations for and against the two-class idea were presented and debated, with the general conclusion that there is likely a spectrum of CME activity rather than just two distinct classes. One of the real highlights of this work was presented by **Bernard Jackson** (University of California San Diego). He and his group use

observations and tomographic techniques to reconstruct spectacular three-dimensional animations of coronal mass ejections. Jackson's work was prominently featured in press conferences originating from SPD/AGU. A frame from one such



The SPD Women's Luncheon was well-attended.

Photo by Julia Saba

animation accompanies this article; interested readers are encouraged to visit the Web site at

http://casswww.ucsd.edu/personal/solar/. One of the major results from this work is the convincing evidence for interactions between different active regions on the Sun; solar physicists have mainly thought of active regions as more-or-less isolated features until now.

*TRACE Results*: The TRACE observations are also shedding new light on possible coronal heating mechanisms. **Markus Aschwanden** (Lockheed-Martin Advanced Technology Center) and his collaborators have been working hard on models of heating of coronal loops. They find that coronal heating mechanisms must operate in or near the chromosphere and transition region, since the observations of these loops are only consistent with heating near the loop footpoints.

**Per Bak** (Imperial College London) was scheduled to give an invited talk on the theory of self-organized criticality as it applies to solar flares; Bak was unavailable, so **Markus Aschwanden** graciously filled in. The matter is by no means settled; **Arnold Benz** (ETH Zurich) pointed out that the "microevents" observed by the Extreme Ultraviolet Imaging Telescope on SOHO are not microflares; their distribution with energy shows they are both more numerous and have a different slope than the extrapolation of large flares to a small scale.

*On the Party Front:* Social events were had in abundance. On Tuesday evening, a wonderful buffet dinner (lots of seafood!) was held for the attendees in the Boston Science Museum. The setting was wonderful, the conversations interesting, and many deserving awardees were presented with honors.

Studentship Awards: I wish to particularly mention this year's SPD Studentship Awardees, who received financial support to present their research at this meeting: The winners of the 2001 SPD Studentship awards, with their institutional affiliation and sponsor, were **Jonathan Cirtain** (U Memphis; *Joan Schmelz*); **Angela Coleman** (MSU; *Dick Canfield*); **Derek Hammer** (GSFC/Catholic U; *Nat Gopalswamy*); **Patricia Jibben** (MSU; *Dick Canfield*); **Erica Raffauf** (Indiana U. Bloomington; *Steve Keil*); and **Yan Xu** (NJIT; *Haimin Wang*).

2001 Hale Prize: As previously announced in the AAS Newsletter, Alan Title (Stanford Lockheed Institute for Space Research, Lockheed Martin Advanced Technology Center) is the 2001 Hale Prize winner. This award is given to a person

15

Continued on page 16

#### **DIVISION NEWS** Continued from page 14

who has made outstanding contributions to the field of solar astronomy, and Alan certainly qualifies. **Judith Karpen** (NRL), chair of the SPD, introduced Alan and presented him with his tee-shirt; the official Prize Certificate was awarded to Alan the following week at the Pasadena AAS Meeting. Alan's invited talk, "The New Science of the Sun," convincingly presented his thesis that a revolution in our understanding of the sun is now in progress, thanks to advances in space missions, ground-based observations, and the computational resources which are allowing us to make sense of the new data and build theoretical models at a heretofore unimagined level of detail. The standing-room-only crowd was very appreciative, and made off with a large number of DVDs produced by **Lockheed-Martin**.

### SPD Popular Science Writing Winners

The 2001 SPD Popular Science Writing Awards have been awarded to **Curtis B. Suplee**, a former staff writer for *The Washington Post*, who now works for the National Science Foundation, and **Paul M. Bellan**, a physicist at the California Institute of Technology.

Paul Bellan's article "Simulating Solar Prominences in the Laboratory" appeared in *American Scientist*, Volume 88, in March/April 2000 and describes how laboratory fusion research techniques provide insight into the structure and behavior of coronal mass ejection.

Curt Suplee's article "Sun Studies May Shed Light on Global Warming" appeared in *The Washington Post* on 9 October 2000 and describes how changes in the sun's energy output may be related to global climate change. A second article by Suplee, "Opening a View to the Far Side of the Sun," appeared in *The Washington Post* on 10 March 2000 and describes how astronomers, using a technique akin to sonar, are able to "see" through the sun to find areas from which flares or coronal mass ejections might occur, providing longer advance warning of hazardous space weather conditions.

The purpose of the popular writing awards is to encourage scientists, science writers, and journalists to write about the sun and thereby educate the public about results from contemporary solar research.

## **Historical Astronomy**

Barbara L. Welther, Chair, bwelther@cfa.harvard.edu



#### **Osterbrock Wins '02 Doggett**

June was a joyful month for **Don Osterbrock**.

On Monday, the 4th of June, he presented the opening plenary talk in Pasadena: "Walter Baade: Father of the Two Stellar Populations and Pioneer Supernova Researcher." Both Osterbrock and his topic of Baade drew a large, appreciative audience in spite of

the early hour.

Later in June, Don received the news that he had been chosen the third recipient of the Doggett Prize.

## HAD at AAS 2002 DC Winter Meeting

Next winter, Don Osterbrock will travel to Washington, DC to deliver the Doggett Prize Lecture at the AAS Meeting in the HAD morning session on Monday, 7 January. His talk has the intriguing title, "The View from the Observatory: History Is Too Important To Be Left To the Historians."

In addition to Don's talk, HAD will meet with AIP on Sunday, 6 January, for a reception and session on "New Views and Venues for Historical Research



The HAD 2002 LeRoy Doggett Prize goes to Don Osterbrock (UC Lick Observatory).

in the 21st Century." There will also be tours of the Niels Bohr Library at the AIP HQ, the new "Explore the Universe" exhibit and the Dibner Library at Smithsonian, and an Open Night at the Naval Observatory.

## **History Meetings**

In July, at the Fifth Biennial Workshop in the History of Astronomy at Notre Dame, at least a quarter of the 63 participants were HAD members. **Steve Dick** and **Marc Rothenberg** served as co-chairs. They cleverly organized more than four dozen papers into eleven sessions for the two-and-a-half-day meeting. This year the workshop drew participants from Austria, Belgium, Canada, Denmark, England, Israel, Mexico, Scotland, Switzerland, The Netherlands, and the United States (from coast to coast). Many of us who attended thought this meeting fostered some of the best history of astronomy discussions we've ever had. To encourage more discussion in future workshops, **David DeVorkin** is planning a slightly different format of break-out sessions for the Biennial Workshop in 2003, when the meeting will be held 3–6 July at Notre Dame.

### HAD at Pasadena Meeting

At the AAS Council Meeting in Pasadena on Sunday, 3 June, I had an opportunity to talk with some of the chairmen of other AAS Divisions. We compared notes on developing divisional web pages, evolving procedures for electronic elections, increasing the frequency of awarding divisional prizes, planning joint meetings, and other issues. In the coming months, HAD officers and committee will consider some of these ideas for presentation to the membership at our business meeting next January in Washington.

## **HONORED ELSEWHERE**

#### Faber Elected to American Philosophical Society

**Sandra Faber**, a University Professor of astronomy and astrophysics at the University of California, Santa Cruz, was elected to the American Philosophical Society on April 29.

The learned society, founded in 1743 by Benjamin Franklin, honors extraordinary accomplishments in all fields.

#### Van Dishoeck, Marc Aaronson Memorial Lecturer

Steward Observatory, NOAO, and Marianne Kun (Aaronson) selected **Ewine van Dishoeck** of Leiden University in The Netherlands to be the ninth Marc Aaronson Memorial Lecturer. The Aaronson Award is given to an observational astronomer for a decade long body of work that has led to a significant improvement in our understanding of the Universe, or to a theorist who has significantly influenced the practice of observational astronomy.

#### Library Association Honors Eichhorn

The Physics-Astronomy-Mathematics Division (PAM) of the Special Libraries Association has selected Guenther Eichhorn, Project Scientist, Harvard-Smithsonian Center for Astrophysics, to receive the PAM Award for the year 2001. The PAM Award is presented periodically in recognition of a "significant contribution to either the literature of physics, astronomy, or mathematics or to honor work that demonstrably improves the exchange of information in physics, astronomy or mathematics and significantly benefits libraries and enhances the ability of librarians to provide service." In bestowing the award, PAM commended Eichhorn for his part in the genesis and growth of the Astrophysics Data System, the development of which represents an unparalleled shift in the propagation of the literature of astronomy. He began as project manager in 1992, and the system went online in 1993. The award was presented to Eichhorn at the 92nd Annual Special Libraries Association Conference in San Antonio, Texas, on 12 June 2001.

#### Four Win NSF CAREER Grants

Four AAS Members have won NSF CAREER grants in FY2001:

• **Charles F. Gammie** of the University of Illinois, Urbana-Champaign for research entitled, "Theory of Black Hole Accretion Flows;"

• Margaret M. Hanson, University of Cincinnati for "Spectral Analysis of Massive Stars in the Near-Infrared;"

• Ata Sarajedini, University of Florida, for "Stellar Populations in the Local Volume;" and

• Yun Wang, University of Oklahoma, for "Model Independent Constraints on Fundamental Physics Using Cosmological Data."

#### PASADENA MEETING HIGHLIGHTS

Continued from page 8

Charles Lada (right, Center for Astrophysics) and August Muench (below, left, U. Florida) presented evidence for the origin of brown dwarfs. Geoffrey Marcy (below, right, U. California, Berkeley) commented on their findings.





Sir Martin Rees (Institute of Astronomy, Cambridge) gave an overview of gamma-ray bursts.



(From left) Peter Stockman (STScI), Marcia Rieke (U. Arizona), Hashima Hassan (NASA HQ), and John Mather (NASA's GSFC) provided an update on the progress of the Next Generation Space Telescope.



## 2001 Awards To Lane, Ehlers

President Anneila Sargent presented one of the two AAS-AMS-APS Public Service Awards to Dr. **Neal Lane**, former director of the NSF and President Clinton's Science Advisor, in a special ceremony on 16 May 2001. The other winner this year was Congressman **Vernon J. Ehlers** (R-MI) one of two physicist members of Congress. Ehlers quipped that he had determined the doubling time for the growth function of physicists in Congress and estimated that by the year 2050 all members of Congress would be physicists.

Both Lane and Ehlers received this special award from the three societies for their long-term advocacy for basic research, especially in the physical sciences. Several members of Congress and senior policymakers were in attendance at the House Science Space and Basic Research Subcommittee hearing room function. The AAS and its partner societies present this award on a yearly basis to one to four public figures who demonstrate strong and long-term support for science, especially in the public policy arena.



AAS President Anneila Sargent (right) was on hand to present the 2001 AAS-AMS-APS Public Service Awards to Neal Lane (left), former director of the NSF and President Clinton's Science Advisor and to Rep. Vernon J. Ehlers (R-MI) in recognition of their long-time advocacy of basic research in the physical sciences.

Photo by Rick Kozak

## ANNOUNCEMENTS

### CSO Call for Proposals Due 31 Oct 2001

The Caltech Submillimeter Observatory (CSO) encourages observing participation by astronomers from both US and non-US institutions. For complete instructions for application and information about available instruments, including new receivers, see http://www.submm.caltech.edu/cso/cso-call.html.

Applications for observing time between 1 Feb 2002 through 31 July 2002 are due by mail on 31 October 2001. Applications will be reviewed by an outside peer group.

### **NSO Observing Proposals**

The current deadlines for submitting observing proposals to the National Solar Observatory are **15 August 2001** for the fourth quarter of 2001 and 15 November 2001 for the first quarter of 2002. Forms and information are available from the NSO Telescope Allocation Committee at PO Box 62, Sunspot, NM 88349 for Sacramento Peak facilities (sp@sunspot.noao.edu) or PO Box 26732, Tucson, AZ 85726 for Kitt Peak facilities (nso@noao.edu). A TeX or PostScript template and instruction sheet can be emailed at your request; obtained by anonymous ftp from ftp.sunspot.noao.edu (cd observing templates) or ftp.noao.edu (cd nso/nsoforms); or downloaded from the WWW at http://www.nso.noao.edu/. A Windows-based observing-request form is also available at the WWW site. Users' Manuals are available at http://www.sunspot.noao.edu/telescopes.html for the SP facilities and http://www.nso.noao.edu/nsokp/nsokp.html for the KP facilities. Proposers to SP may inquire whether the Adaptive Optics system may be available for their use. Observing time at National Observatories is provided as support to the astronomical community by the National Science Foundation.

### **Call for NRAO Observing Proposals**

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

• •	· ·		
Instrument	Deadline	Observing Period	Note
VLA	2001 Oct 1	2002 Jan-2002 Apr	A config/max baseline 36 km
	2002 Feb 1	2002 May-2002 Aug	B config/max baseline 11 km
VLBA	2001 Oct 1	2002 Jan-2002 Apr	
	2002 Feb 1	2002 May-2002 Aug	

Calls for the new NRAO Green Bank Telescope (GBT) will be announced by the list-serve gbtnews.

The NRAO and the European VLBI Network jointly handle proposals for observing time on the Global VLBI Network. The deadline is **1 October 2001** for the session in February 2002. Further information on NRAO instruments and proposal submission routes is available from the NRAO home page at http://www.nrao.edu.

### Hubble Telescope Cycle 11 Call for Proposals

NASA and The Space Telescope Science Institute (STScI) are pleased to announce the Cycle 11 Call for Proposals for Hubble Space Telescope (HST) Observations, Archival Research and Theoretical Research. Participation in this program is open to all categories of organizations, both domestic and foreign, including educational institutions, profit and nonprofit organizations, NASA Centers, and other Government agencies. This solicitation will be open from 11 June 2001 through **7 September 2001**, 8:00pm EDT, and proposals may be submitted throughout this period. Results of the selection will be announced in December 2001.

All programmatic and technical information, as well as specific guidelines for proposal preparation, are available electronically at http://www.stsci.edu/ftp/proposer/cycle11/announce.html. Questions can be addressed to the STScI Help Desk, help@stsci.edu; Tel.: 410-338-1082.

### **OVRO mm Array Proposals Due 5 September**

The California Institute of Technology invites observing proposals for the Owens Valley Radio Observatory (OVRO) six element millimeter wave interferometer. The proposal deadline is 5 PM PDT, **5 September 2001** for observations between October 2001 through January 2002. The OVRO interferometer operates in the 3mm and 1mm bands, and can achieve an angular resolution between 1-10" in the high, equatorial, low, and compact configurations. Instructions for submitting proposals and technical information about the interferometer can be found at http://www.ovro.caltech.edu/mm/main.html. Questions concerning the interferometer or proposal submission may be directed toward John Carpenter at mailto:jmc@astro.caltech.edu; Tel: 626-395-4024.

### Kuwait Prize 2001: Call for Nominations

The Kuwait Foundation for the Advancement of Sciences (KFAS) calls for nominations for the Kuwait Prize in Basic Sciences, this year dedicated to Astronomy. Two prizes will be awarded in this category; one to recognize distinguished scientific research by a Kuwait citizen and a second for research by an Arab citizen. Each prize consists of a cash sum of approximately \$100,000 US, a gold medal, certificate and a KFAS shield. The research must have been published during the last ten years. Nominations must be received by **31 October 2001**. For complete information, contact the KFAS, PO Box 25263, Safat-13113, Kuwait or prize@kfas.org.kw.

#### AGU Sullivan and Perlman Journalism Awards

The American Geophysical Union seeks nominations for two annual journalism awards: the Walter Sullivan Award for Excellence in Science Journalism: Features and the David Perlman Award for Excellence in Science Journalism: News.

These awards recognize work that enhances public awareness and understanding of the sciences encompassed by AGU: the study of the Earth, the Sun, the solar system, and their environments and components. The Perlman Award is for work produced under deadline pressure of one week or less, while the Sullivan Award is for work produced with longer lead time. Work in any medium, except books, is eligible, as long as it was intended for and available to the general public. Work from any country and in any language is eligible.

For the 2002 awards, entries must first have been published between 16 December 2000 and 15 December 2001. Entries must be received at AGU no later than **31 December 2001**. See http://www.agu.org/sci\_soc/sci\_awards.html for complete prize rules, eligibility requirements, nomination form and list of previous winners.

#### Nominate for COSPAR Awards and Medals

The Committee on Space Research (COSPAR) is seeking candidates to be nominated for COSPAR Awards and Medals, which recognize the outstanding achievements of space scientists throughout the world. COSPAR will present the awards at its 34<sup>th</sup> Scientific Assembly to be held with the International Astronautical Federation (IAF) as part of the World Space Congress in Houston, Texas in 10–19 October 2002. For further information, see http://www.copernicus.org/COSPAR/COSPAR.html.

#### Space Science Award

This award honors a scientist who has made outstanding contributions to space science. Previous recipients include: R. M. Bonnet (2000), D. Hunten (2000), M. Neugebauer (1998), C. Cesarsky (1998), M. Oda (1996), N. Ness (1996), J. Trümper (1994), G. Haerendel (1994), E. Stone, Jr. (1992), J. Simpson (1990), S. Mandelshtam (1988), K. Gringauz (1988), L. Biermann (1986), and J. Van Allen (1984).

#### International Cooperation Medal

This medal is awarded to a scientist (or group of scientists) who has made distinguished contributions to space science and whose work has contributed significantly to the promotion of international scientific cooperation. Previous recipients include: J. H. Carver (2000), R. Lüst (1998), A. Grigoriev (1996), R. Daniel (1994), H. Curien (1992), B. Hultqvist (1990), C. de Jager (1988), The Inter-Agency Consultative Group (1986) and R. Sagdeev (1984).

#### William Nordberg Medal

The Nordberg Medal is presented to a scientist who has made a distinguished contribution to the application of space science. Previous recipients include: K. Ijiri (2000), A. Thompson (1998), C. Elachi (1996), P. Morel (1994), J. Houghton (1992), D. King-Hale (1990), S. I. Rasool (1988).

#### Distinguished Service Medal

This medal serves to honor extraordinary services rendered to COSPAR over many years. Previous recipients include: S. Grzedzielski (2001), R. Hart (1996), A. Somogyi (1994), J.-F. Denisse (1993), Z. Niemirowicz (1992).

#### Massey Award

The Massey Award is an award of the Royal Society of London and recognizes outstanding contributions to the development of space research in which a leadership role is of particular importance. Previous recipients include: S. C. Bowyer (2000), R. Sunyaev (1998), J. Geiss (1996), R. Wilson (1994), H. Friedman (1992), and H. van de Hulst (1990).

#### Vikram Sarabhai Award

This honor is awarded by the Indian Space Research Organization, in honor of Vikram Sarabhai, for outstanding contributions to space research in developing countries. Eligible candidates for next years award must have performed relevant work mainly in the 1996–2001 period. Previous recipients include: Z. Liu (2000), J. Baker (1998), U. R. Rao (1996), J. Blamont (1994), C.-Y. Tu (1992), and V. Kotelnikov (1990).

#### Zeldovich Medal

The Zeldovich Medal is conferred by the Russian Academy of Sciences to young scientists for excellence and achievements. Medals are presented to a scientist in each of COSPAR's Scientific Commissions. Recipients of the 2000 Zeldovich Medals were: S. T. Gille (Commission A); R. Meier (Commission B); S. D. Eckermann (Commission C); V. Angelopoulos (Commission D); T. Tsuru (Commission E); M. P. Bernstein (Commission F); J. Leypoldt (Commission G); A. Vecchio (Commission H).

Nomination forms can be obtained from Pamela Whitney (202-334-3477, pwhitney@nas.edu) at the National Research Council, Space Studies Board (SSB), which is the US adhering body to COSPAR. All nominations will be processed by the SSB and must be endorsed by the US National Representative to COSPAR, Dr. L. J. Lanzerotti. Completed nomination packages must be submitted to the SSB no later than **28 September 2001**.

## **GENERAL NEWS**



After her year as an APS Congressional Science Fellow expires, we are fortunate that AAS Member Stephan will continue as a science policy advisor to Congress.

#### Life on Capitol Hill: A Congressional Fellow's View

#### Sherri G. Stephan, 2000-2001 APS Congressional Science Fellow

When I first began my year as a Congressional Science Fellow, I was asked by AAS to share my experiences and give a glimpse of what Capitol Hill is like. However, the time I have spent on Capitol Hill has been anything but typical, so inferring trends from my experiences should be done with caution.

Together with 38 other Congressional Science Fellows, I started my fellowship year with an

intensive two week orientation. By the middle of September 2000 I was ready to set out to find a position on Capitol Hill and start giving much-needed science advice to Congress. Congress was in the midst of a bloody and drawn-out budget battle that was interrupted by the elections. All of the House of Representatives, one third of the Senate, and the presidency were up for grabs. My fellow fellows and I could tell this was going to be an interesting year.

I accepted a position on the Senate Governmental Affairs Subcommittee for International Security, Proliferation and Federal Services. This can be abbreviated as GAC-ISPFS, which is shorter, but equally difficult to pronounce. As a committee staffer, I work for the chairman or ranking Minority member of the committee or subcommittee. Senator Daniel Akaka (D-HI) was, at that time, ranking Minority member of the Subcommittee, and my boss.

I quickly got to work, wading through piles of material on a handful of subjects that the staff director thought would suit my background in experimental space physics. These included missile defense and proliferation, dual-use technologies and export controls, general aerospace industry and space issues, and nuclear proliferation.

These topics became the "issues I do," Capitol Hill lingo for subjects that staffers concentrate on, monitor and on which staffers are generally considered the in-house expert. Soon, these topics are joined by a host of others, including biological and chemical weapons, treaties and multinational agreements, proliferation of weapons of mass destruction, agriculture and environmental security, military space management and assets, military transformation, terrorism and natural disasters. In short, I became the defacto expert on all things "scientific." I have also added several federal service issues, such as the science and engineering workforce shortages in the federal government, regulatory reform and policy, science and technology assessment capabilities across the federal government, FEMA, some education reform, and a few Presidential nominations.

Since these are my issues, I have learned some general information about all of them, and more importantly, I know where to find more detailed information. As a Congressional Science Fellow, one of the best and quickest resources for finding information is the other Fellows. Other sources I consult frequently are the Congressional Research Service, the General Accounting Service, and, of course, the Internet.

"But what do you *do* all day," you may ask? I do a lot of writing and listening. I write briefing memos, summary statements, speeches, floor statements, questions for hearings, and press releases. I listen to lobbyists and agency folks, and go to a lot of seminars and briefings. I also frequently do the logistics and organizing for meetings, hearings, and briefings. Occasionally, I brief the Senator and senior staff. No one day is like any other and most plans I have for any given day are usually null and void by 10am.

After the turmoil of the elections, the Senate was operating under a 50-50 split. I felt privileged to be witness to such an historical event. The year was progressing nicely, and I was finally feeling like I was getting the hang of things when "it" happened. The Senator Jeffords switch from the Republican Party to an Independent changed everything. Suddenly, Senator Akaka, became part of the Majority and was named chairman of the Subcommittee; we were setting the agenda, and things got *really* busy. In addition to everything else, I also get to arrange hearings, and supervise some new staff. In our spare time, we try to think up a catchy new name for the Subcommittee.

The other question I usually get is, "so, what *are* you when your fellowship is over in September?" I have given this question considerable thought. Should I go back to academia, go into industry, or stay in policy? I have decided to stay in policy, at least for a little while longer. This decision was made easier when the Subcommittee staff director asked me stay on as professional staff.

This year has been very fulfilling and I am having a great time. Anyone that has the opportunity or inkling to be a Congressional fellow should pursue it. Since I have decided to stay on staff, I have gotten more responsibility and am again starting to feel like I know what I am doing. Hopefully, this time it will last longer. After all, nothing *else* can happen, right?



(From left) John Huchra, Joe Alexander, Chris Conselice and Meg Urry discuss strategy for Congressional Visits Day (see story, page 24). Photo by Kevin Marvel

#### **Seeking Authors on 20th Century Astronomers**

Thomas Hockey, hockey@uni.edu

I am editing an exciting new, multi-volume work, The Biographical Encyclopedia of Astronomers, to be produced by Kluwer Academic Publishers. This first-of-its-kind book (plus subscription WWW site) will fulfill a long-standing need in the history-of-astronomy community and in reference libraries. Content editors include Prof. Katherine Bracher (Whitman Col.), Dr. Sara Schechner (Harvard), Prof. Virginia Trimble (UM & UCI), Dr. Thomas Williams (Rice), and Prof. F. Jamil Ragep (Oklahoma).

I write to invite the contribution of articles. Each article is to be less than 1,500 words long (some much less), detailing the contributions and life of an individual who has influenced astronomy. A list of appropriate subjects in the category "Astronomers of the Twentieth Century," for which we still need authors is:

- Andrew De La Crommelin
- J. Howard Dellinger
- Raymond Dugan
- Nils Duner •
- Wallace Eckert
- Christian Elvev
- Johannes Hartmann
- · Harold Jeffreys
- Louise Jenkins
- Freidrich Kruger
- Andre Lallamand
- Armin Leuscher
- K. Gunnar Malmquist
- Nicholas Mayall
- Carl Neuman •
- Edison Pettit
- . Theodore Phillips
- Henry Plummer
- · Richard Prager
- Grote Reber

- Karl Reinmuth
- Frederick Schwassman
- Frederick Slocum •
- G. C. Southworth
- Harold Spencer-Jones ٠
- Harlan Stetson
- Gustav Stromberg
- H. Eduard Suess
- George Thomson
- Albrecht Unsold
- Gale Van Albada
- Frank Very
- E. H. Von Zeipel
- A. A. Wachmann
- Rupert Wildt
- Johannes Wilsing
- Herbert Wilson
- · Gustav Witt
- Richard Woolley

Write me to obtain any additional information including compensation, format, and deadlines: Thomas Hockey, Department of Earth Science, University of Northern Iowa, Cedar Falls, IA 50614; FAX: 319-273-7124, hockey@uni.edu.

#### ANNOUNCEMENTS Continued from page 19

### **Call for NASA IRTF Observing Proposals.**

The NASA Infrared Telescope Facility is accepting observing proposals for the 1 February-31 July 2002 semester.

Instructions for applications and information can be found at: http://irtf.ifa.hawaii.edu/userSupport/UserSupportFrame.html. Available instruments include: (1) For 1-5 microns: a 3-pixel scale camera with a circular variable filter, a cross dispersed moderate resolution spectrograph, and a high resolution spectrograph. 2) For 5–25 microns: a camera, a low-resolution wide spectral range spectrograph, and high-resolution spectrographs for 8-25 microns.

The deadline for submission of proposals is 1 October 2001.

### **NAS Call for Prize Nominations**

The National Academy of Sciences is accepting nominations for:

The Arctowski Medal, a prize of \$20,000 and a \$60,000 award to an institution of the recipient's choice to further research in solar physics and solar-terrestrial relationships. The award is presented every three years for outstanding contributions to the study of solar physics and solar-terrestrial relationships.

The Arthur L. Day Prize and Lectureship, a prize of \$20,000 awarded every three years for new contributions to the physics of the earth. In addition, the recipient will deliver a series of lectures at an institution other than his or her own.

Nominations will be accepted through **31 August 2001**. For more information contact: National Academy of Sciences, Awards Program, Room NAS 185, 2101 Constitution Avenue, NW, Washington, D.C. 20418; Tel: 202-334-1602, Fax: 202-334-1682, awards@nas.edu. For complete information see http://national-academies.org/nas/awards.

#### Theodore Dunham, Jr. Grants in Astronomy

The Fund for Astrophysical Research, Inc. invites applications for the award of small research grants in astronomy. Applications must be received by 8 October 2001. Notification of awards will be made and funds will be disbursed in December 2001. For detailed guidelines and application procedures, see http://www.fdncenter.org/grantmaker/fundastro.

#### Night Sky Webcams Now Online

Astronomers observing at Kitt Peak and Mauna Kea might be interested to know that near-live images of the night sky from those locations are being posted daily on http://concam.net. The images result from the CONtinuous CAMera (CONCAM) project with major funding provided by the NSF. Stars near visual magnitude six are visible near the image center, making the images similar to that seen by the unaided human eve. CONCAM data is released immediately into the public domain and an online archive going back several months is kept in FITS and browser-friendly formats.

Teachers of astronomy might make use of the CONCAM archive to supplement classroom discussions with real-sky examples of diurnal motion, relative solar and sidereal times, locations of bright stars and constellations, current positions and relative motions of planets, the Galactic plane, zodiacal light, satellite trails and glints, and meteors.

Several other CONCAMs are scheduled to be deployed over the next year. Observatories and universities interested in hosting a CONCAM should email Robert Nemiroff at nemiroff@mtu.edu or Bruce Rafert at jbrafert@mtu.edu.

### **SUMER/SOHO Image Database**

A new facility for accessing SUMER data is now operational. More than four million SUMER spectral images obtained to date may be viewed or downloaded. The system is primarily using the SOHO CD-ROM telemetry data, but also consults the SUMER file catalogue prepared by I. E. Dammasch for the SOHO archive. All data are in the public domain. and accessible at

http://www.linmpi.mpg.de/english/projekte/sumer/FILE/SumerEntryPage.html.

The system is still under construction; please let designers know if there are problems using this resource by contacting Klaus Wilhelm at wilhelm@linmpi.mpg.de.

K. A. Strand

#### *WASHINGTON NEWS* Continued from page 24



#### AAAS Report Published

The article below by Kevin Marvel was published as Chapter 14 in AAAS Report XXVI: Research and Development FY2002 by the Intersociety Working Group of the American Academy for the Advancement of Science, Washington, DC, 2001.

The report highlights programs in the President's budget request for 2002. During its budget review, Congress may modify both the programs and the dollars in the President's request to arrive at the final FY2002 budget. An online summary of this report is available at the AAAS website at http://www.aaas.org/spp/dspp/rd/xxvi/rd02main.htm

## Astronomy in the FY 2002 Budget

#### Kevin Marvel

#### Highlights

• The National Aeronautics and Space Administration's (NASA) exploration of Mars (Mars Exploration Program) would continue under a slightly increased budget (although compared to FY 2000 this budget item is up 73% or \$182 million). The President's FY 2002 budget proposes an increase of 0.8% to \$431 billion. In response to recent discoveries that strongly suggest the presence of water on mars, a series of Mars Exploration Rovers would grow quickly under the current budget proposal.

• The National Science Foundation's (NSF) division of Astronomical Sciences (AST) is proposed to receive an increase of about 5% to a level of \$156.3 million for FY 2002, but this increase does not represent an overall increase for astronomy funding at the agency. The transfer of funding for the 5<sup>th</sup> year of Design and Development of the Atacama Large Millimeter Array (ALMA) from the Major Research Equipment account to the division budget and other details artificially inflate the proposed division increase.

• NASA plans to begin funding for two new missions, MESSENGER and Deep Impact and to continue to expand its Discovery program, which provides access to space for small planetary science missions. MESSENGER would be the first mission to Mercury since Mariner 10 in 1974 and Deep Impact will follow on NASA's successful, but not originally planned, landing of a probe on an asteroid (the NEAR mission) by actually plunging a probe into the surface of a comet. Overall, the Discovery program would receive \$217.1 million in FY 2002, an increase of \$4.1 million or 2% compared to the FY 2001 level.

• The Office of Space Science would also expand a technology development program dubbed New Millennium. This program's main goal is to develop revolutionary technologies and flight-test them. The underlying justification is to speed up the missions by improved propulsion while making the missions cheaper.

The Astronomy research community has produced a prioritized program for research investments in the coming decade. This National Research Council report (*Astronomy and Astrophysics in the New Millennium*, http://books.nap.edu/catalog/9839.html) presents a community consensus of the projects and programs that should be carried out over the coming decade and is unique among all the sciences.

#### Introduction

The sky belongs to all of humanity and astronomy has a special role to play in bringing knowledge of the cosmos to us all. Beginning with the earliest recorded history, the sky and the objects to be seen there are described, studied and analyzed. Only in modern times have we truly found our place in the Universe. We live out our lives on a relatively small planet orbiting a rather normal star in an average galaxy. Just in this century, astronomers have determined how the chemical elements that make up our Earth (and us!) were formed in supernova explosions. Astronomers have managed to trace the history of the Universe back to its very first moments when all matter and light were compressed into a dense energetic state that rapidly expanded (for as yet unknown reasons) forming our Universe. This cosmic explosion is now known as the Big Bang. In the past decade, astronomers have finally discovered planets around other stars, confirming that our solar system is not unique.

NASA provides roughly 75% of the funding for US astronomical research (http://www.nap.edu/books/0309071399/html) for individuals. When the budget for the Office of Space Science is changed, many American astronomers can be affected. NASA continues to provide observing opportunities for astronomers beyond the hindering absorption of the atmosphere. NSF also funds a significant amount of the astronomical research that takes place in the United States, including constructing and operating the US National Observatories. These observatories play a critical role for researchers from smaller institutions for which large observing facilities are too expensive to construct and operate. They also provide access for American astronomers to the sky in the southern hemisphere, where many important astronomical objects are located.

A traditional, but arbitrary, split in funding exists between NASA and NSF with NASA funding space-based observing and NSF funding ground-based. This line is often blurred, since both agencies support balloon-based observing. NASA does support ground-based observing when these activities have a direct supporting role for their space missions. A recent example is the Keck Interferometer and both agencies are pursuing collaborative efforts such as the National Virtual Observatory program, which will interconnect databases, telescopic observations, space mission archives and research tools for astronomy and astrophysics. These collaborations reflect the way astronomers pursue their research, using any means necessary to study the objects that interest them.

A reform provision in the President's budget calls for the formation of a blue ribbon panel to review the implications of moving NSF-funded astronomy research under NASA's control. The panel, now called the Committee on the Organization and Management of Research in Astronomy and Astrophysics, or COMRAA (http://www.nas.edu/bpa/projects/brp), was formed in late April 2001 and will present its recommendations to the President by 1 September 2001. The recommendations from this panel could have a sweeping impact on the way astronomy is carried out and funded in the United States. The astronomical community is watching this process closely.

#### Astronomy in the NASA Budget

Once again, the NASA budget will be increasing, though modestly. From a level of \$14.2 billion in FY 2001, NASA would receive an increase of 1.8% to a level of just over \$14.5 billion for FY2002. The bulk of this increase would go to the Science, Aeronautics and Technology portion of the agency's budget, which would also see an overall increase of 1.8%, or \$125 million to \$7.2 billion.

The Office of Space Science (OSS) would experience a healthy budgetary growth of 6.2% from a level of \$2.6 billion to a FY2002 total of just under \$2.8 billion. The office has four long-term goals, which may be posed as simple, penetrating questions. How did the Universe, galaxies, stars, the Sun and planets form and evolve? How can exploration of the Universe and our solar system revolutionize our understanding of physics, chemistry and biology? Are there Earth-like planets beyond our solar system? Does life in any form, however simple or complex, carbon-based or other, exist elsewhere than on planet Earth?

To attempt to answer these questions, the OSS has undertaken a series of missions that attempt to answer fundamental scientific questions. Although too numerous to mention here, a few of the missions stand out as particularly exciting (in addition to those mentioned in the *Highlights* section above).

*Chandra X-ray Observatory*: Deployed in July of 1999, the Chandra telescope (one of the four great observatories, which includes the Hubble Space Telescope, the Compton Gamma-ray Observatory and the Space Infrared Telescope Facility) has produced dramatic images of supernova remnants, active galactic nuclei and diffuse X-ray emission found in clusters of galaxies. This observatory will continue to produce exciting science results throughout the next several years and is expected to remain operational until 2009.

*Space Infrared Telescope Facility* (SIRTF): The fourth and final great observatory, this telescope is now slated for launch in July of 2002. The President's budget proposes a continued development expenditure of \$106 million in FY 2002. This amount is lower (about 10.5%) than the FY 2001 amount, as planned. This instrument is sensitive to the infrared portion of the electromagnetic radiation and in its high orbit above Earth will observe the earliest era of galaxy formation as well as sub-stellar mass objects in our own galaxy. The project was completely restructured to fit within a fixed (FY1994 value) of \$400 million cost ceiling (self-imposed by NASA). The scientists responded and using cost-cutting measures as well as technological advances will still be able to meet most of the science goals of the originally designed instrument.

Stratospheric Observatory for Infrared Astronomy (SOFIA): This airborne observatory replaces the Kuiper Airborne Observatory, which was retired in October of 1995. This collaborative project with the German space agency, DARA, has met delays in the development of the German telescope assembly. These delays have pushed the beginning of science operations into FY2002. *Research program*: This program, part of the wider supporting research and technology line item, supports researchers through peer-reviewed proposal selection. This program would receive an overall increase of about 1.6% in FY2002 to a level of \$607 million. The line item consists of both Research and Analysis (mainly direct funding to researchers) and Data Analysis (funding for reduction of mission data). The R&A line receives an increase of 0.6% to \$246.2 million from \$244.7 million, while the Data Analysis portion receives an increase of about 3% to \$319.2 million from \$310.5 million.

#### Astronomy in the NSF Budget

NSF funds astronomy through its Division of Astronomical Sciences. This funding is split into two basic units, *Astronomy Research and Instrumentation*, which funds individual researchers, instrument development projects and some research centers such as the center for adaptive optics and *Facilities*, which supports the National Astronomy facilities such as the National Radio Astronomy Observatory, National Optical Astronomy Observatories, Gemini 8 meter telescopes and the National Astronomy and Ionosphere Center.

The Astronomy Research and Instrumentation portion would receive an apparent increase of 1.4% to \$54.7 million, although this total would include about \$7 million for NSF-wide programs such as the Information Technology Research (ITR, http://www.itr.nsf.gov) program or the Science Technology Centers (STC, http://www.nsf.gov/od/oia/programs/stc/start.htm) program, to which other scientists may also apply. Astronomers should be pleased to know that in FY2000, an adaptive optics center (http://cfao.ucolick.org) was established under the STC program and in FY1991 an astrophysical research center in the Antarctic was established (http://astro.uchicago.edu/cara/home.html), both of which have had direct benefit to the astronomical community.

The Astronomy Facilities would seemingly receive a large increase of 7.2%, or \$6.850 million with a FY2002 proposed funding level of \$101.5 million. This increase is mainly due to the transfer of funds for a 5<sup>th</sup> year of design and development of the ALMA telescope from the Major Research Equipment line to the division budget. This shift could have serious ramifications for the long-term health of this international collaborative project. ALMA was originally slated to move into construction in FY2000, was delayed beyond FY2001 and the President's "no new starts" policy prohibited it from beginning construction in FY2002. Other facilities would receive small increases, roughly inflationary adjustments or less.

Astronomy is also supported within the NSF budget both through the Office of Polar Programs (OPP) and the Major Research Equipment (MRE) line. The exact amounts expended by OPP for astronomy research were not available.

#### Astronomy Elsewhere in the Budget

Both the Navy and Air Force fund fundamental astronomical research for a variety of reasons related to national security. Although exact numbers were not available, the total amount expended is not as large as either NSF or NASA. The Department of Energy also funds astrophysical research under its office of basic science. Again, detailed funding levels are not easily determined. The Smithsonian Institution also supports a wide array of astronomical research through its Center for Astrophysics, including telescopes in Hawaii and Arizona.

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## **WASHINGTON NEWS**

Kevin Marvel. Associate Executive Office for Policy Programs



Another Successful CVD

Photos by Kevin Marvel This year on 1 and 2 May, more than 250 scientists, engineers and technology experts banded together to tell policy makers of the importance of Federal investment in Research. Organized by the Science, Engineering and Technology Workgroup and the Coalition for Technology Partnerships,

this is the sixth year the Congressional Visits Day (CVD) program has taken place. The AAS has participated in the event for the past two years and plans to continue to join with other science societies to encourage Congress to support science.

The AAS had a record number of participants this year, 14! Led by CAPP Chair **Marcia Rieke**, the AAS contingent visited 23 Congressional offices, NASA HQ staff, NSF-AST staff and budget examiners for NASA and NSF at the Office of Management and Budget. All participants felt that the event was a valuable exercise and several promised to encourage their colleagues to begin to communicate with Congress and participate in policymaking at the National level. The other AAS CAPP participants were **Jack O. Burns**, **Harold Reitsema**, **Joseph Alexander**, **Rachel Akeson**, **Roger Blandford**, **John Huchra**, **David Black** and **Robert Williams**. As we did last year, the AAS fielded several "early-career" members. Early-career participation exposes members to the policy-making process earlier than they might be otherwise and also encourages career-long civic interactions. The "early-career" participants were **Chris DePree**, **Kathryn Johnston**, **Christopher Conselice**, **Meg Urry** and **Jim Brauher**. Early-career members, who would like to participate next year, may contact a member of CAPP or Kevin Marvel at the Executive Office (marvel@aas.org).



(Clockwise, from left) John Huchra, Jack Burns, Rachel Akeson, Kathryn Johnson, Meg Urry, Harold Reitsema, Chris De Pree, Jim Brauher and Chris Conselise prepare to convince Senate Appropriations Committee staff of the importance of basic research funding.