# September/ October 2008 Issue 142

3

Copin Awarded 2008 Chrétien Grant

### 4

2009 AAS Elections Final Slate

5 Publications News

6

2009 Membership Dues & Renewals

8 Status of the

Leap Second

13 HST Servicing Newsflash

Back page Washington News



# **AAS Newsletter** A Publication for the members of the American Astronomical Society

# Long Beach Meeting

The 2009 winter meeting will be held at the Long Beach Convention Center 4-8 January. Close to the same waters that saw the historic Spruce Goose flight just sixty two years ago and now home to the Queen Mary, Long Beach is a dynamic and interesting location for a meeting with all the modern amenities and a safe and welcoming downtown.

The AAS will meet with two of our Divisions, the High Energy Astrophysics Division (HEAD) and the Historical Astronomy Division (HAD). Please note that the days for this meeting are more typical of our winter meetings, with the opening reception being held on Sunday evening 4 January and scientific sessions beginning on Monday, 5 January.

This meeting will host the US IYA opening ceremony and serve as the kickoff for the International Year of Astronomy 2009. Special sessions will feature a wide range of interesting topics including Astronomy in China (with an accompanying invited talk by Dr. Gang Zhao), Cosmology from SDSS-2 and a special launch session for the Decadal Survey (with an accompanying talk by the yet-to-be-named (as of this writing) chair of the Survey. Other invited talks include the Russell lecturer Rashid Sunyaev, a special memorial lecture in honor of Donald Osterbrock by Donald Olson, Cannon Prize winner Jenny Greene, Warner Prize winner Eliot Quataert, Pierce Prize winner Lisa Kewley and four talks by the joint winners of the Rossi Prize as well as the Heineman Prize winner, Andy Fabian. An invited public policy speaker, well known in astronomy-policy circles, has been invited to address our gathered members. Once confirmed, we will announce this speaker on the meeting web page.

These sessions and invited lecturers, combined with the always interesting contributions of AAS members are sure to make the 213th AAS meeting a meeting to remember. The Long Beach area has grown and improved in recent years and features a wide range of comfortable hotels, tasty restaurants and interesting sights and activities, including a world-class aquarium.

# Pasadena Meeting in a Meeting

Proposals are welcomed for one to four day meetings in a meeting. Sessions are 90 minutes each and held in parallel with other contributed and special sessions. These sessions adjourn at the times of plenary talks and normal AAS break times. Proposers have great flexibility in structuring the oral presentations during their meeting sessions. This format could be used for workshop-type events, training sessions, longer oral presentations, etc.

Essentially there is full flexibility with a "Meeting-in-a-Meeting." Let the AAS handle the logistics and you can focus on the scientific content of your meeting.

We encourage all AAS members to consider whether they have a meeting concept that would fit within the "Meeting-in-a-Meeting" format and submit a proposal accordingly. The Committee on Meetings will review the proposals and select appropriate content for the Pasadena meeting at the upcoming Long Beach meeting. Proposers will be notified soon after about the status of their proposal. Submit your proposals by 15 December for full and proper consideration.

# Pasadena Special Session Proposals

Special Session Proposals should be submitted by 15 December 2008. See aas.org/meetings/meeting\_content.php#how for more information.

AAS Officers and Councilors John P. Huchra, President J. Craig Wheeler, Past-President Robert W. O'Connell, Vice-President Lee W. Hartmann, Vice-President Christine Jones, Vice-President Hervey (Peter) Stockman, Treasurer John A. Graham, Secretary Richard F. Green, Publications Board Chair Timothy F. Slater, Education Officer Stephen P. Maran, Press Officer

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The *AAS Newsletter* (ISSN 8750-9350) is published bi-monthly by the American Astronomical Society, 2000 Florida Avenue, NW, Suite 400, Washington, DC 20009-1231; Tel: 202-328-2010, Fax: 202-234-2560, aas@aas.org; www.aas.org.

The \$133.00 annual membership dues for the American Astronomical Society include \$3.00 that is applied toward a subscription to the *AAS Newsletter*. Periodical postage paid at Washington, DC.

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

Items of general interest to be considered for publication in the AAS Newsletter should be sent to crystal@aas.org. Appropriate pictures are welcome. For information about deadlines and submitting articles, see www.aas.org/ publications/newsletter.php. Items submitted to the AAS Newsletter are not automatically included in the AAS Electronic Announcements or vice versa. Submit electronic announcement items to crystal@aas.org.

Judith M. Johnson, Editor Crystal M. Tinch, Associate Editor Jeff Linsky, U. Colorado, Associate Editor, Letters

#### Manuscript Submissions Using AASTeX

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

#### AASTeX Homepage: aastex.aas.org User Support: aastex-help@aas.org Journal Homepages/Manuscript Submission: journals.aas.org

AAS Email Policy To unsubscribe from AAS emails, contact address@aas.org

For address changes, email address@aas.org

# From the Executive Office

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

The rhythm of the AAS matches the rhythm of academia. Summer is a time to recharge, catch up on thinking and get ready for the busy fall. Here at your Executive Office, we are preparing for membership renewals, which will begin online 1 September, with reminders being sent out regularly during the fall. We are also helping the DPS organize what has all the makings of a fantastic DPS meeting in Ithaca. The organizers are taking a number of measures to decrease the environmental impact of the meeting, which is a great thing, and we will see how their efforts are received and consider implementing successful ideas for AAS meetings in the future.

The transition of our journals continues apace, with ApJ beginning to accept papers through IOP's online system in September and ApJL following later in the fall. So far the transition has been nearly invisible to our authors, but this is only because of the hard work of our editorial staff (big kudos to our managing editors, Anita Makuluni, Janice Sexton and Elizabeth Korves) and the transition team at IOP. Director of Publishing, Chris Biemesderfer, will continue to monitor the transition and ensure that our journals are not negatively impacted by delays or other issues.

I took some time this August to recharge and prepare for what will be a busy policy time this fall by kayaking in Maine. There is nothing like paddling alone in a small boat a mile or so offshore to focus you down on the bare essentials. I am feeling recharged already, only halfway through my vacation, and will come back to DC ready for an interesting fall full of policy work. Congress still has not passed a budget. We will have a presidential election and in a short window of time, from mid November to early December, try and educate the incoming administration on the importance of basic research, especially astronomy research. We expect final passage of a budget sometime after the election, but before the presidential inauguration.

Please pay attention to deadlines for the Long Beach meeting. The size of our winter meetings is causing us to move deadlines back a bit from normal to accommodate the ever more complex meetings that so clearly benefit our field. With the increasing cost of travel, we will regularly capture the invited and prize talks at our meetings and make them available online as a member benefit. Our early experiments in this area are openly available and have been well used as well as complimented by astronomers worldwide. As a final note, if you have international colleagues whom you think would benefit from AAS membership, but who do not want to pay full membership dues, please remind them of our International Affiliate membership class, which costs half as much and has reduced membership benefits.

As always, send me your comments. I try and respond immediately to all input and take all comments into consideration as we shape the services to our members for the future.

Now, back to the paddling, the lobsters and blueberries!

# Letter from the President

#### Dear AAS Members:

The American Astronomical Society supports our profession in multiple ways. Our meetings and journals are our most prominent activities, but we also reward individuals with prizes and other forms of recognition, we are active in education and public outreach, and we work with agencies both to provide forums for discussion and also improve the level of funding for astronomy and science in general.

We hope that many of you, especially our senior colleagues, will be willing to make a special contribution to the Society during the 2008 renewal period. Of particular note is that many of our prizes are thinly funded. The John Bahcall Public Policy Fellowship and the George Van Biesbroeck programs were designated by Council as the special focus programs for 2008, and we would like to continue that focus in 2009 until both programs are on a solid footing.

The John Bahcall Public Policy Fellowship is designed for an early-career astronomer to gain valuable, first-hand experience in the public policy arena. Responsibilities include organizing the annual Congressional Visits Day, direct lobbying visits, communication with AAS members, and analyzing the federal budget for astronomy. This is currently a six-month appointment. With your generous donation, AAS hopes to make this a one-year fellowship. Each dollar donated will be matched, up to a maximum amount, by Neta Bahcall, so your contribution can be twice as effective.

The George Van Biesbroeck Award is normally awarded every two years and honors a living individual for long-term extraordinary or unselfish service to astronomy, often beyond the requirements of his or her paid position. We seek to offer this award annually.

I hope that you will consider a regular program of giving, but please start with a contribution this year. We have made this easy with a link right on the main page of the AAS web site: Donate to the AAS. You can give a generic gift, or select the particular category you would like to support. The AAS is a 501(c)3 non-profit corporation and all donations are fully tax deductible. Additionally, your 2009 renewal invoice will contain the normal donation options, whether you renew using our new online system or through the traditional paper process.

Thank you for investing in the future of astronomy in North America.

Sincerely,

John Huchra president@aas.org

# Copin Awarded 2008 Chrétien Grant



Yannick Copin (Institut de Physique Nucleaire de Lyon, France) has been awarded the 2008 Chrétien International Research Grant for the project entitled "High-precision Spectro-photometry of Supernovae." The main goal of this project is to develop techniques to permit the effective removal of the underlying host galaxy spectrum from that of the SNIa supernova. The cosmological importance of these supernovae makes the problem very timely, and Copin is an expert in the "integral-field spectrograph" instrumentation used for this work.

Copin will receive a grant of \$15,000 to assist with the expenses of a 10-month sabbatical visit by himself and his family to the Lawrence Berkeley National Laboratory in order to further develop and test his methods using data taken in the "SNFactory" project.

# Secretary's Corner

John Graham, aassec@aas.org

### 2009 AAS Elections Final Slate

The following people have been nominated for office; most of the terms begin June 2009. Either an election ballot or details on voting electronically will be included in the December *AAS Newsletter*. The election will close 31 January 2009.

The list of candidates presented is the slate as of the printing of the newsletter. The final ballot will be made available online (or by mail if requested) during voting should any writein candidates be submitted to the Secretary's office by the deadline.

President	Michael A'Hearn Debra Elmegreen
Vice-President	Robert Rosner Lee Anne Willson
Education Officer	Timothy F. Slater
Councilors	Jonathan Elias Richard French James Lowenthal Thomas Statler Michelle Thornley Jennifer Wiseman
USNC-IAU	William Blair Brian Chaboyer
Nominating Committee	Thomas Bania Gina Brissenden James Klimchuk Edward Schmidt

### Committee Vacancies need to be Filled

Vacancies for several AAS committees will be filled by Council at its meeting in Long Beach, California in January 2009. Current committee members are listed under "Committees" on the AAS homepage, www.aas.org. Committees that have vacancies are:

Russell Lectureship Committee Heineman Prize Committee Warner and Pierce Prize Committee Annie J. Cannon Prize Committee AAS Education Prize Committee Tinsley Award Committee Weber Award Committee Henri Chrétien Grant Committee Van Biesbroeck Prize Committee The Council takes advice from the Committee on Appointments for committee posts, AAS members may volunteer to serve on a committee, or suggest other members for one of the vacancies. To be most useful to the Committee on Appointments, who may not know everyone, please include the date of Ph.D., as well as a few sentences conveying to the Committee the background and area of expertise of the named individual. Your help will be very much appreciated. We truly need to have both quality and breadth on our committees in order to help them make wise and fair recommendations to the Council.

Input must be received in the Office of the Secretary no later than 1 December 2008. Submit suggestions to John A. Graham, AAS Secretary, by email to aassec@aas.org or at the Dept. of Terrestrial Magnetism, Carnegie Institution of Washington, 5241 Broad Branch Rd., NW, Washington, DC 20015, Fax: (202) 478-8821.

### Message to Associate Members

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 and whose expertise could benefit the Society, cannot serve. Associate members, please consider upgrading, and becoming more involved with Society activities! There is no increase in dues! (See a description of the different membership classes in the Bylaws, Article I.1, or on the membership application form.) If any of you have questions, please contact me at aassec@aas.org.

### 2009 Membership Invoices

AAS members will be receiving their 2009 membership invoices soon after this issue of the *AAS Newsletter*. Since virtually everyone eventually does pay their dues, please consider prompt payment! Prompt payment saves the Society staff considerable effort and time in reminders, which translates into saving money for all of us!

# Member Spotlight

In each issue, we will feature one member, their research or other work, a bit of their history and their picture. We will accept suggestions for this feature, but no self-nominations. If you know of a fellow member who does interesting research, came to our field through interesting circumstances or is just a fantastic person, consider submitting their story to us for possible publication (500 word limit). We will only publish stories approved by members willing to be featured. Email your suggestion to Crystal Tinch, crystal@aas.org.

# **Publications News**

# ApJ Publishing Transition Update

Ethan Vishniac, Editor-in-Chief, The Astrophysical Journal

The publication of *The Astrophysical Journal* will be supported by the Institute of Physics (IOP) Publishing starting with the 2009 volumes. Preparations have been under way for a year, and many people have worked hard together to ensure that the journal will continue to serve the community, as it has throughout its lifetime.

You will soon see new software tools for handling the submission, editing, and publication of *ApJ* papers. Beginning 1 September, new *ApJ* and *ApJ Supplement* manuscripts will be submitted via IOP's web-based ATOM system; new manuscripts for the *ApJ Letters* will be submitted via ATOM beginning 15 October. The remaining *ApJ* issues for 2008 will be published by the University of Chicago Press, but gradually through to the end of this year, all publishing activity will move to IOP. We encourage you to visit the AAS journals portal at http://journals.aas.org/ where you will see a link on the right that will take you to the *ApJ* author submission page. This page explains how to access and use the IOP authors services.

We are confident that the move to IOP will positively affect the process of producing the ApJ by widening our options for future technical development without changing the basic character of the journal. The ApJ will remain an excellent venue for presenting scholarly results from a full spectrum of astronomical research. We look forward to an exciting partnership with IOP.

# ApJ Letters Introduces Changes to Strengthen Its Electronic Publication

Chris Sneden, Letters Editor, The Astrophysical Journal

The Astrophysical Journal will commence publication by the Institute of Physics (IOP) with the 1 January 2009 issue. As part of this transition, we are pleased to announce that a major change will be initiated for ApJ Letters: The fundamental publication mode from that date forward will be electronic. This has ramifications on the way the paper journal is printed, the way issues are assembled, and – crucially for ApJ Letters – the ways that submitted content is measured.

Criteria for *ApJ Letters* will continue to be scientific immediacy and brevity. However, with the emphasis on electronic *ApJ Letters* delivery, the traditional 4.00 printed page limit has become obsolete. We will instead impose a content-counting system that is intended to follow the spirit of the four-page limit, while being more transparent to authors.

The new length limits for *ApJ Letters* manuscripts will be as follows; these criteria will apply to all submissions beginning 15 October 2008.

Manuscript section	Maximum
Abstract length	250 words
Manuscript length	3500 words
References	50
Figures and Tables	5 total
Machine-readable tables	1

# **Member Deaths**

The Society is saddened to learn of the deaths of the following members, former members and affiliate members:

#### **Edmond Reeves**

### Letters to the Editor

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

# **Opting In and Out** of AAS Publications

If you would no longer like to receive paper copies of the AAS Newsletter, the AAS Membership Directory, or the AAS Calendar, please send an email to address@aas.org or log into your member record at aas.org.

To unsubscribe from AAS emails, contact address@aas.org These length metrics have been designed to try to mimic as closely as possible the spirit of the four-page limit. The specific new limits have been set up with AASTeX-using authors in mind (thus covering about 95% of *ApJ Letters* submissions). Editorial judgment will be exercised in individual cases that do not easily match the criteria given here. Additionally, the editors reserve the right to adjust these limits in the future, with sufficient notice to authors.

An on-line manuscript length estimator will be provided for authors when the new system commences. The vast majority of *ApJ Letters* authors will thus be able to submit papers knowing that length will not be an issue in the publication process. If papers that conform to these guidelines turn out to take slightly more than four pages after typesetting, no adjustments will be asked of authors. Manuscripts using very non-standard LaTeX, or not conforming to *ApJ Letters* author guidelines in major ways may be returned to author to be revised using standard AASTeX/LaTeX. For all *ApJ Letters* published in the new system, a single author charge of \$600 will replace the current fee that varies with content. No additional charge will be assessed for color figures (which will appear in all published electronic material including typeset PDF files).

Another change in this mode of publishing is that articles will be published as they are ready, in the order in which they are completed. This will apply to all renditions of the journal, the print as well as the online edition. This means that articles will not be re-ordered according to their topic when they are printed.

Finally, *ApJ Letters* will no longer be printed using offset printing presses. Digital printing technology is now sufficient to render a print version that is in all ways equivalent to the present printed form. Subscribers will still be able to order a print version in addition to the electronic edition.

# 2009 Membership Dues

### AAS Membership Rates

- \$141 Full
- \$141 Associate
- \$48 Junior
- \$ 69 Emeritus
- \$ 69 International Affiliate
- \$ 69 Educator Affiliate

#### **Division Dues**

Division on Dynamical Astronomy (DDA) AAS Member: \$10, Division Affiliate: \$15

Division for Planetary Sciences (DPS) AAS Member: \$15, Division Affiliate: \$20

Division for Planetary Sciences (DPS) Student (for first two years) AAS Member: \$10, Division Affiliate: n/a

High Energy Astrophysics Division (HEAD) AAS Member: \$10, Division Affiliate: n/a

Historical Astronomy Division (HAD) AAS Member: \$8, Division Affiliate: \$10

Solar Physics Division (SPD) AAS Member: \$8, Division Affiliate: \$10

# 2009 AAS Renewals

The 2009 renewal period is here! With almost fifty percent of the membership renewing online during the 2008 renewal period we considered it a success and look forward to additional member participation this year. Renewing early saves the AAS substantial cost and increases the funding available for our programs.

To renew online:

- Login to members.aas.org.
- Select "e-Billing Reminder."
- Your 2009 invoice and instructions will appear.

Additionally you will be able to support the Society's activities and prizes with an online contribution.

- Go to: members.aas.org/Contributions
- Select a prize or activity that contribution by clicking on it.
- If you are a member, type your last name, first name, email address, and then click "Search."
- Your name should show up. Click "This is me."
- Type your name and credit card payment information.
- If you are not a member, just click "Skip Search" and type your name and credit card payment information.
- Click "Submit Credit Card Information."

The AAS Membership Department will be available to help with any problems at membership@aas.org or by calling us at 202-328-2010.

# Planning for Astro2010 Well Underway

### Planning

Planning is at an advanced stage for the next astronomy and astrophysics decadal survey—the next in a series of surveys that have been carried out approximately every 10 years. This

series has provided priorities for the federal investment and have enabled the remarkable success of the field with facilities such as the Hubble Space Telescope. The decadal survey process is organized by the National Academy of Sciences' (NAS) Board on Physics and Astronomy (BPA) in cooperation with the NAS Space Studies Board (SSB), and the study is being sponsored by NASA, NSF and (for the first time) DOE.

Now that negotiations with the sponsors are complete on the scope of the study, the survey committee is expected to be appointed over the summer months with a first meeting in the fall. At that first meeting, the

survey committee will decide on the structure and timeline of the study, including the organization and reporting schedule for the up to nine panels that are envisioned. Each panel will report directly to the survey committee to communicate the results of their respective panel's deliberations. The exact organizational nature of relationship will be determined by the survey committee. Upon receiving each panel's final input, the survey committee will discuss their recommendations and develop a decadal research strategy for the field.

### Membership

The process to appoint the chair of the Astro2010 survey committee is well underway. The National Research Coincil (NRC) solicited suggestions for chair from the community by means of several mechanisms. An email announcement was sent to the membership of the American Astronomical Society in early June 2008 requesting suggestions for the chair and membership of the survey committee and panels. Also, in an address to the Astronomy Section of the National Academy of Sciences during the April 2008 NAS meeting, NAS Astronomy Section chair John Huchra and BPA chair Anneila Sargent asked for nominations for the survey chair position. Suggestions were also gathered during Town Hall meetings jointly held at the April 2007 APS Meeting, the January 2007 AAS Meeting, and the January 2008 AAS Meeting.

Over 300 members of the astronomy and astrophysics community suggested a total of 85 candidates for the position of Astro2010 chair. To sift through these suggestions, the BPA and SSB formed a search committee that has considered the suggestions for chair and developed a short list of candidates at its meeting on 14 July 2008. The short list is now being considered by the BPA and SSB and the NRC's Division of Engineering and Physical Sciences, before being presented to the NRC Chair and NAS President, Dr. Ralph Cicerone, who will make the appointment. This process should be complete

Charge

The committee will survey the field of space- and ground-based astronomy and astrophysics, recommending priorities for the most important scientific and technical activities of the decade 2010-2020.

The principal goals of the study will be to carry out an assessment of activities in astronomy and astrophysics, including both new and previously identified concepts, and to prepare a concise report that will be addressed to the agencies supporting the field, the Congressional committees with jurisdiction over those agencies, and the scientific community. by mid/late August. As with all NRC panels, Dr. Ralph Cicerone will also appoint the survey committee and panel members.

Suggestions for survey committee and panel members are still welcome, and should be submitted as soon as possible; the cut off dates are as follows:

- •Nominations for Survey Committee membership were taken through 15 August 2008
- •Nominations for panel membership will be taken through 15 October 2008

These cut off dates are subject

to change as the appointment process progresses. Please check the Astro2010 website for updates. A web-based nominations form can be found at www.nationalacademies. org/astro2010.

Throughout the study, the committee and sub-panels will continue to solicit community input. Researchers and other interested parties will be able to submit written contributions to the survey process and a series of town meetings will be held, including at the AAS meeting in Long Beach, CA in January 2009. Details of all these activities can be found on the Astro2010 web page. By the time of the January 2009 AAS meeting, the survey will be well underway and the town meeting there will provide an early opportunity for the community to interact with the chair and committee members.

### Scope

The decadal survey will address the future of the U.S. astronomy and astrophysics program by formulating a decadal research strategy with recommendations for initiatives in priority order within different categories (related to the size of projects and their home agencies). In addition to reviewing individual initiatives, aspects of infrastructure, and so on, the committee will take a comprehensive look at the U.S. astronomy and astrophysics program and make a judgment about how well the program addresses the range of scientific opportunities and how it might be optimized. The guiding principle in developing the decadal research strategy and the priorities will be maximizing future scientific progress.

In contrast to previous surveys of the field, in view of the number of previously recommended but unrealized projects, the prioritization process will include those unrealized projects and it will not be assumed that they will go forward. Projects that are sufficiently developed in terms of engineering design and technology development or have been given a formal start by the sponsoring agency would not, in general, be subject to reprioritization.

# Status of the Leap Second

Jim Ulvestad, Chair

The AAS Leap Second Committee was formed at the AAS Council Meeting in June 2006. Membership includes Todd Boroson (NOAO), Suzanne Hawley (U. Washington), Dennis McCarthy (USNO), William Owen (JPL), Kenneth Seidelmann (U. Virginia), and Jim Ulvestad, Chair (NRAO). The committee was charged with recommending a formal AAS position on the possible abolition of the leap second, for provision to the U.S. State Department and the International Telecommunication Union - Radiocommunications Sector (ITU-R). For those who are not leap-second aficionados, the primary purpose of the leap second is to keep the absolute value of (UT1-UTC) smaller than 0.9 seconds. UTC is Coordinated Universal Time, typically used in civil and astronomical timekeeping, whereas UT1 is an angle measured by the rotation of the Earth relative to the stars, conventionally used as a time scale. UT1 and UTC drift apart because the Earth's rotation is slowing down (primarily due to the influence of the Moon), and the insertion of leap seconds keeps them more or less in synchrony (within the aforementioned difference of less than a second). The International Earth Rotation Service has recently announced that a leap second will be inserted at the end of 2008 in order to meet the requirements on (UT1-UTC); this is the first leap second since the end of 2005, and the second since the end of 1998.

In late 2006, we surveyed a wide cross-section of the US astronomical community, particularly including astronomy departments, observatories, and NASA missions. We received very little response to that survey. Informal oneon-one inquiries to representatives of some optical and radio observatories, as well as space missions, yielded replies stating that relevant pointing and data-processing models already include the actual Earth orientation (hence the real value of UT1), and do not rely on the assumption that (UT1-UTC) is small. From a sociological point of view, abolishing the leap second would result in a divergence between UT1 and UTC that would amount to 2-3 minutes in 2100, and up to 30 minutes in 2700; these divergences are smaller than those we already accept from solar time due to the Earth's noncircular orbit around the Sun, the finite width of time zones, and the implementation of daylight/summer time. Because there appeared to be no consensus about whether it is more costly for observatories to insert leap seconds from time to time,

or to abolish them, the AAS has taken no position on the abolition of the leap second. In January 2008, the AAS Council accepted a recommendation that the Leap Second Committee be disbanded, pending completion of this article for the AAS Newsletter.

The elimination of leap seconds has been proposed largely from members of the timekeeping, communications, and navigation-products user communities. However, there is a community of users who have software and methodology based on 35 years of experience with the current definition, and changing that software and methodology may present some real challenges. Most modern astronomers have little knowledge of positional astronomy, so the distinction between Coordinated Universal Time (UTC) and the Earth's rotation angle is probably lost on all but a small percentage of AAS members. They rely on the people who program telescope (and other instrument) control and data analysis systems to "get it right" so they don't have to worry about such things. The discontinuation of leap seconds, if approved, would therefore most affect those who have to develop and maintain operational software.

It is difficult to reach an informed decision on the elimination of the leap second. There has been no rigorous cost analysis regarding either the cost of inserting leap seconds or the cost of software changes to accommodate a redefinition of UTC. The most comprehensive analysis of the impact on AAS members was produced in a 2006 report to the AAS Council from the Division on Dynamical Astronomy (DDA) Working Group on Time and Coordinate Systems. That report, including an assessment of the pros and cons of redefining UTC, is available from the AAS Public Policy web site at aas.org/policy/CurrentIssues.php.

At present, a draft recommendation of ITU-R Working Party 7A reads "that the application of leap second adjustments to UTC should cease five years after the entry into force of the appropriate World Radiocommunication Conference Final Acts, with a target date of 01.01.2019." Those who wish to comment on this draft recommendation to abolish the leap second at the beginning of 2019 should send comments to the Chairman of US Working Party 7A of the ITU-R, Wayne Hanson, at hanson@boulder.nist.gov.

# **Division News**

# **Solar Physics Division (SPD)** Todd Hoeksema, Chair

The 2008 Solar Physics Division Annual Meeting was organized by SPD Vice-Chair Jim Klimchuk (GSFC) and held in conjunction with the American Geophysical Union, and in particular the AGU's Space Physics and Aeronomy section, at the AGU's "Meeting of the Americas" 27 - 30 May 2008 in Fort Laudredale, Florida. In addition to hundreds of talks and posters, the Hale Prize lecture was given by Hugh Hudson (UC, Berkeley) and the Karen Harvey early career

prize lecture given by Mark Linton (NRL). There was a very well attended special session on the 50th anniversary of Gene Parker's famous solar wind paper, and a competition for the best student poster was inaugurated. The SPD traditionally meets with the AAS one year, with the AGU the next, and by itself the third, and in 2009 the SPD meeting will be solo in Boulder, Colorado 14-18 June.



Left: SPD Chair J. Todd Hoeksema presents the Hale Prize certificate to Hugh Hudson. Photo courtesy of Dick Shine. Middle: SPD studentship awardees and committee members: Gordon Emslie (Oklahoma State), Maria Kazachenko (Montana State), Andres Munoz-Jaramillo (Montana State), Anna Malanushenko (Montana State), Donald Schmit (Colorado), K.S. Balsubramaniam (AFRL). Right: Mark Linton (NRL) receives the 2008 Karen Harvey Prize certificate from SPD Chair J. Todd Hoeksema (Stanford).



Left: Zoe Frank (Lockheed-Martin) once again produced an outstanding SPD display and held down the fort with occasional help from a few friends – here Jesper Schou (Stanford). Middle: Present and past Parker Lecturers, who are Bowie Lecturers of the AGU Space Physics and Aeronomy Section, gathered at the SPD/AGU Joint Assembly in Fort Lauderdale on the occasion of the 50th anniversary of Eugene Parker's famous paper predicting the existence of the supersonic solar wind: Randy Jokipii (2005), Ed Stone (1993), Len Fisk (1999), Gene Parker (1990), Marty Lee (2008), Marcia Neugebauer (1997), Bob Lin (2002), and John Leibacher (1996). Missing are John Simpson (1992, deceased), Art Hundhausen (1994), Ian Axford (2000), Jack Gosling (2004), and Ed Smith (2007). Photo courtesy of Paul Cooper. Right: Jason Kimple (Memphis) and Fana Mulu (Alabama A and M) wish each other best of luck in the SPD student poster competition.



Left: The joint AAS/SPD-AGU/SPA "banquet" was held on a cruise up and down the inland waterway, complete with drawbridges parting their ways. Middle: A decade's worth of SPD Chairs. (L-R) John Leibacher (NSO), Ed Deluca (SAO), Jim Klimchuk (GSFC), J. Todd Hoeksema (Stanford), Shadia Habbal (Hawaii). Right: Jennifer Garst, James Andrews, and Joan Schmelz (Memphis) enjoy the AGU's famous free beer afternoon poster session.



This year marked the inauguration of the SPD Student Poster of the Year award, aimed at promoting the excellent research presented by students at the annual SPD meeting. The SPD Student Committee extends its thanks to all the members who contributed to the poster evaluations.

With over twenty high-quality posters as candidates, the evaluators had a very challenging job in selecting the winner of this inaugural contest. Criteria used in the evaluation of candidate posters were the readability and "flow" of the poster, the overall importance of the research, and the value added through oral discussions with the poster presenter.

The SPD Student Committee is pleased to announce that the winner of the inaugural Student Poster of the Year contest is Laurel Rachmeler of the University of Colorado at Boulder, for her

poster entitled "Modeling Coronal Jets with FLUX," coauthored with Etienne Parat, Spiro Antiochos, and Craig Deforest. The evaluators were greatly impressed not only with the overall lucidity of the material presented, but also with Laurel's enthusiasm for the work, her appreciation of the value and context of the research, and her ability to expertly answer questions during oral discussions.

# High Energy Astrophysics Division (HEAD)

Mitch Begelman, Chair Chryssa Kouveliotou, Vice-Chair Ann Hornschemeier, Secretary-Treasurer (headsec@aas.org)

### High-Energy Astrophysics at NASA

The last few months have been an exciting time for highenergy astrophysics at NASA. A major new gamma-ray observatory—the Gamma-Ray Large Area Space Telescope (GLAST)—was launched on 11 June. By all accounts, both of its instruments—the Large Area Telescope (LAT) and the GLAST Burst Monitor (GBM) are performing flawlessly.

High-energy projects figured prominently in the recent selections of Small Explorer (SMEX) proposals for further study. The Gravity and Extreme Magnetism SMEX (GEMS) would be the first mission focusing on X-ray polarimetry, while the Joint Astrophysics Nascent Universe Satellite (JANUS) would combine a gamma-ray burst detector with an infrared telescope to probe the cosmic history of star formation. A High-Resolution Soft X-Ray Spectrometer (SXS) was also selected as a SMEX "Mission of Opportunity" to be included in the instrument package for Astro-H (formerly NeXT), a joint mission between NASA and the Japanese Space Agency, JAXA.

Lastly, there has been a major change in planning for the next "Great Observatory"-class X-ray mission. NASA has reached an agreement with the European Space Agency (ESA) and JAXA to study a single mission concept, the International X-ray Observatory (IXO). IXO would replace NASA's Constellation-X project and the ESA/JAXA X-ray Evolving Universe Satellite (XEUS), and will be developed jointly for presentation to both the US Decadal Survey and Europe's Cosmic Vision selection process.

### HEAD Special Sessions at the Long Beach AAS

HEAD is organizing three special sessions at the January 2009 AAS meeting in Long Beach, CA. Two of the sessions will consist of invited talks on the themes of "Signatures of Supermassive Black Holes" and "TeV Astronomy." The Rossi Prize lecture, to be given by prizewinners Steven Allen, J. Patrick Henry, Maxim Markevitch, and Alexey Vikhlinin, will deal with the evolution of clusters of galaxies and their role in cosmological investigations. All of these sessions are intended to appeal to a broad audience of astronomers, so please join us even if your interests are distinctly "low-energy."

### **Rossi Prize Nominations Wanted!**

Please consider nominating your colleagues who have recently had major accomplishments in high energy astrophysics for the Rossi Prize. Nominations are due to the HEAD secretarytreasurer (Ann Hornschemeier) at headsec@aas.org no later than 15 October 2008 (\_aas.org/head/rossi/rossi.prize.html ). Since letters are required as part of the nomination process, we recommend getting an early start on your nominations.

### Announcing the 11<sup>th</sup> HEAD Divisional Meeting....in Hawaii!

The next HEAD Divisional Meeting will be held 1-4 March 2010, at the Hilton Waikoloa Village on the Kohala Coast of Hawaii's Big Island.

# **Division for Planetary Sciences (DPS)** Richard P. Binzel, Chair, rpb@mit.edu



Left to right: Michael A'Hearn, G. Jeffrey Taylor, Jon D. Giorgini

### News from the Division for Planetary Sciences

The 2008 Division for Planetary Sciences Kuiper Award, the Sagan Medal and the Masursky Award will be presented during the 40th Annual Meeting to be held in Ithaca, New York (10-15 October 2008).

Michael A'Hearn is the winner of the 2008 Gerard P. Kuiper award for outstanding contributions to planetary science. He is the Principal Investigator of NASA's Deep Impact Mission. Noteworthy among his accomplishments is a landmark paper that analyzed 85 comets observed over 17 years, confirming the distinct compositional groupings of comets related to place of formation.

G. Jeffrey Taylor is the winner of the Carl Sagan Medal for Excellence in Public Communication in Planetary Science. At the University of Hawaii, Jeff has developed several major educational tools including educational videos; a book and curriculum materials for use in schools with the Lunar Sample Disk. However, Jeff's most ambitious outreach project is a website that he started in 1996 with Linda Martel, the Planetary Science Research Discoveries – PSRD (www.psrd.hawaii.edu/).

Jon D. Giorgini is the winner of the 2008 Harold Masursky Award for Meritorious Service to Planetary Science. A specialist at the NASA Jet Propulsion Laboratory, Jon developed and implemented the on-line Horizons system that is used by the international scientific community to generate real-time, accurate ephemeris information for more than 400,000 solar system bodies, including the sun, planets and their satellites, comets, asteroids, and spacecraft.

# **Committee on Employment**

Knut Olsen, kolsen@noao.edu

### Balancing Research and Service at NOAO

When I left graduate school to take up a postdoc at the Cerro Tololo Inter-American Observatory in Chile (a division of NOAO), I had experience in research and in teaching, but very little with the inner workings of an observatory. I had been on a few observing runs, but never visited a major observatory, CTIO included. I was excited by the opportunity to learn about the technical aspects of observational astronomy to experience first-hand how the tools on which our work depends are developed and maintained, while at the same time getting my research career going. My first impression of CTIO was that the staff were extremely dedicated to the mission of the observatory - providing first-rate facilities for the US astronomical community in the southern hemisphere - but at the apparent expense of their own research. As my main ambition was still to do research, I at first felt a little out of place.

As I got to know CTIO better, however, I found that most of the staff were, after all, dedicated to their research. All felt strongly that having a scientific staff active in research was absolutely essential for the observatory. Observatory operations, user support, and future planning all require expert scientific input. NOAO felt that having staff motivated by their own scientific self-interest was the most natural way to provide excellent support. Although the observatory considered service and research to be roughly equally important, maintaining the balance between them could be tricky, as I learned when I was later hired as a CTIO staff astronomer. Our hallway discussions and meetings were invariably dominated by observatory matters, as these were often the most pressing, while personal research tended to be done in relative quiet, and could thus be disrupted; hence my initial impression that research was getting short shrift. Over time, though, I found that there are some ways to help maintain that balance, as I learned from others and from my own trial and error:

Align your service responsibilities with your research goals: It may sound obvious, but making sure that your service overlaps with your research is key to making sure that you have enough time for research. A good and easy way to start is to make sure that the observatory's facilities feature prominently in your own research, and to offer to help support or be the instrument scientist for an instrument that you frequently use. This is good for both you and the observatory, as your own experience and needs can be used to help improve the experience for all users of the instrument. At CTIO, I was Hydra instrument scientist and on the team that supported the Mosaic imager, both of which I was using in my research. I had a strong interest in working out the kinks with Hydra, because I knew how frustrating it was to have my night lost due to repeated instrument failures. My efforts paid off in that I got the data I needed from Hydra, and, because others came to see me as the Hydra "expert", was able to join some very fun and productive collaborations that also needed Hydra.

If your research begins to outgrow the capabilities of the instruments that you support, then it's time to start thinking of ways to upgrade them, or consider new instruments (or facilities) that would do your science better. Working on science cases for facilities that remain in the distant future can be very helpful in guiding your research, as you will come up with very exciting ideas that will probably require significant groundwork to be done with current facilities. I am currently very excited by the ability of ground-based adaptive optics to study the high surface brightness bulges and disks of nearby galaxies, an interest which arose entirely because I contributed to the science case for a GSMT.

Talk to people: Talking to others about their research is a good way to maintain focus on your own. Make an effort to chat with users that you support about what they aim to do with their telescope time, and how your observatory's facilities fit in to their program. Offering to organize colloquia or seminars for a period is a good way to meet other astronomers, especially if your budget includes buying them lunch or dinner. In Chile, going out to eat with visiting astronomers was an especially good way to establish close relationships with them, since besides being an opportunity for you to talk to them about their research, it was a chance for them to get a local's perspective on Chilean culture. Serving on the observatory TAC is another good way to grow bonds with fellow astronomers, while also giving you an overview of a broad section of the current observational enterprise.

Working with students and/or postdocs is also very useful, although it means removing yourself a step from the actual work in exchange for the reward of helping someone else to learn and discover. At CTIO, we had three-month visits by undergraduate REU students every southern summer, and several graduate students and postdocs on extended visits. They were an integral part of the scientific culture, as they were the only people at the observatory fully dedicated to research.

**Streamline your service work:** If parts of your service tasks become routine, they can sometimes be made more efficient, leaving you more time for research. For instance, for new users of Mosaic and Hydra, we would generally have a staff member present for part of the first night to help get the observers going, which involved 1.5 hours driving from La Serena each way. We eliminated the need to drive to the summit by installing videoconferencing equipment in the control room and downtown, and running the instrument user interface within a remote desktop environment. This

way, the support astronomer downtown could be virtually present in the control room, having access to nearly all of the same screens available to the observer, while saving the large overhead of travel to the summit. a strong sense of accomplishment. If you wish to remain scientifically active, however, it's important that you not become content with these accomplishments, but judge yourself mainly by the success of your research, which in

Avoid over commitment: This is easier said than done, of course, but bears mentioning. In particular, it is important to avoid taking on too many service responsibilities that have no overlap with your research. The truth is that every observatory has a number of tasks unrelated to anyone's research that need to be done by staff astronomers, e.g. editing newsletters, overseeing web page updates, maintaining documentation, and serving on internal committees. Doing this work is important for the success of the observatory and thus should not be refused lightly if you are asked to help. However, this does not mean that you have



When working as a staff astronomer at an international observatory, such as the Cerro Tololo Interamerican Observatory shown above, it can be tricky to balance your service duties with your own research. Knut Olsen offers a few common sense strategies. Image provided by NOAO AURA/NSF.

to shoulder the burden indefinitely. If a task does not have an easily defined point of completion, then you might ask from the beginning to have a time limit on your involvement, after which your responsibilities are handed off to someone else.

**Define your success by your research accomplishments:** You may find that many of your service responsibilities give you a lot of satisfaction. For instance, getting a broken instrument working again, discovering and explaining issues with data obtained from the observatory's facilities, helping users understand their strange data, or finishing off reports from committees on which you've served can all give you many cases can be more difficult and tiresome to achieve. If you find yourself drawing much more satisfaction from your service work than your research, then you might consider reducing your research time in exchange for a larger service load. Indeed, observatories depend heavily on having a portion of their staff dedicated primarily to service for their success. If you envision yourself mainly as a research astronomer, however, don't be tempted to focus more on service, where you have achieved success, because you feel stuck in your research. Work through it.

In summary, working as an NOAO staff astronomer has been rewarding and exciting. It is place to gain a

good technical understanding of telescopes and instruments, be involved in providing access and developing cutting-edge facilities, and have the opportunity to contribute to initiatives of national importance to astronomy. If you can maintain the balance between research and service, it's also a great place to have a productive scientific career.

The AAS Committee on Employment is pleased to highlight useful resources for astronomers, and welcomes your comments and responses to this and previous columns. Please check out our website (www.aas.org/career/) for additional resources and contact information for the committee members.

# HST Servicing Newsflash!

The final servicing mission to the Hubble Space Telescope (HST) is planned for launch in early October and John Grunsfeld, AAS member and astronaut, will fly again to the telescope to service the Hubble with his mission colleagues. To highlight the International Year of Astronomy, John will be flying an STScI-designed IYA banner and an AAS-designed US-IYA commemorative patch (copies of which will be provided free to all Long Beach meeting attendees and the remainder of this limited edition patch will be auctioned off to support the IYA).

John will also be flying an Italian-provided replica of one of Galileo's telescopes, a small student-built replica of the HST from the University of Colorado and, perhaps most interestingly, a championship basketball from the University of Chicago, circa 1909 that Edwin Hubble actually used. Quoting an email from John, "The HST, will be at the apex of its capability following the servicing with two new instruments, the Wide Field Camera 3 (WFC-3) and Cosmic Origins Spectrograph (COS), plus the repair of Advanced Camera for Surveys (ACS) and Space Telescope Imaging Spectrograph (STIS). The solidarity of the AAS community, help from Congress and the American public has led to this historic mission."

The AAS wishes the STS-125 crew smooth flying and a successful mission!

# News from NSF Division of Astronomical Sciences

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

### Staff Changes at AST

The Astronomy Division is pleased to welcome two new program officers to NSF. Dr. Jeffrey Pier joins the Division to manage programs in instrumentation and technology development projects. Jeff comes to AST from a long and distinguished career at the US Naval Observatory, where he served as director of the Flagstaff station for the past five years.

Dr. Don Terndrup joins AST as a program officer in the Astronomy and Astrophysics Research Grants program, where he will have primary responsibility for the area of stellar astronomy and astrophysics. Don comes to the Division on a visiting appointment from the Ohio State University, where he has served on the faculty for many years.

Drs. Michael Briley and Julian Christou have completed their rotations at NSF and have departed AST. Mike has returned to the University of Wisconsin, Oshkosh, and Julian has taken a position at the Gemini Observatory. They were valued members of the AST team and will be sorely missed. We thank them both for their significant contributions.

# Upcoming NSF-wide Funding Opportunities

# NSF/DOE Partnership in Basic Plasma Science and Engineering

The Directorates for Engineering, Geosciences, and Mathematical and Physical Sciences of the National Science Foundation and the Office of Science/Office of Fusion Energy Sciences of the Department of Energy are continuing in FY2009 the joint Partnership in Basic Plasma Science and Engineering. The goal of this three year (FY09-FY11) program initiative is to enhance plasma research and education in this broad, multidisciplinary field by coordinating efforts and combining resources of the two agencies. The initiative will address fundamental issues in plasma science and engineering that can have impact in other areas or disciplines in which improved basic understanding of the plasma state is needed. Target date for receipt of proposals is 22 October 2008.

#### Please see program announcement NSF 08-589

(www.nsf.gov/pubs/2008/nsf08589/nsf08589.htm) for more detail and a description of general research areas that are included in the initiative. Contact Nigel Sharp (nsharp@nsf. gov or 703-292-4905) for more information.

#### Accelerating Discovery in Science and Engineering through Petascale Simulations and Analysis (PetaApps)

The PetaApps solicitation (NSF 08-592) seeks proposals to develop the future simulation and analysis tools that can use petascale computing to advance the frontiers of scientific and

engineering research. Proposals are sought from researchers aiming to capitalize on emerging petascale computing architectures, catalyzing potentially transformative research. NSF's emphasis is on implementation and exploitation of forefront techniques. Proposers must be prepared to demonstrate that they have a research problem that requires and can exploit petascale computing capabilities. Proposals from or including junior researchers are encouraged, as one of the goals of this solicitation is to build a community capable of using petascale computing. Deadline date for receipt of proposals is 30 October 2008.

Please see program announcement NSF 08-592 (www. nsf.gov/publications/pub\_summ.jsp?ods\_key=nsf08592) for more detail and contact Nigel Sharp (nsharp@nsf.gov or 703-292-4905) for more information.

# Cyber-Enabled Discovery and Innovation (CDI)

The CDI program will continue in FY2009. A new program solicitation is under preparation and should be released before the end of the fiscal year. Although there are expected to be a number of changes, for reference, the solicitation for last year's program (NSF 07-603) is available at www.nsf.gov/publications/pub\_summ.jsp?ods\_key=nsf07603.

Please contact Nigel Sharp (nsharp@nsf.gov or 703-292-4905) for more information.

# Upcoming Deadlines for AST FY2009 funding

**1 November 2008:** Advanced Technologies and Instrumentation Program (ATI). Please contact Dr. Jeff Pier (jpier@nsf.gov or 703-292-2977) for information

**15 November 2008:** Astronomy & Astrophysics Research Grants (AAG) (NSF 05-608) See program announcement NSF 05-608 (www.nsf.gov/publications/pub\_summ. jsp?ods\_key=nsf05608). The 15 November deadline also applies for proposals that qualify under the Research at Undergraduate Institutions (RUI) program. See program announcement NSF 00-144 at (www.nsf.gov/publications/pub\_summ.jsp?ods\_key=nsf00144).

**22 January 2009:** Major Research Instrumentation Program (MRI) (NSF 08-503)

### Stricter Enforcement of Proposal Submission Rules

We remind potential PIs of our intent to return without review proposals that violate the rules in the applicable release of the Grant Proposal Guide (www.nsf.gov/publications/ pub\_summ.jsp?ods\_key=gpg) - NSF 08-1.

Please pay special attention to:

- Addressing broader impact in the one-page project summary
- Including results of prior support any NSF award for the PI or any CoPI in the last five years
- Formatting character size and spacing; margins (including figures)
- Providing complete biographical sketches, especially lists of collaborators
- Inappropriate use of supplements, especially material that should be in the project description
- Inappropriate letters of endorsement.

Further details appeared in previous AAS newsletters (e.g. 136 and especially 134).

We also recommend you consider getting a download of your entire proposal in pdf format to make sure it is what you think you submitted. As always, you are encouraged to contact any of the listed program officers for clarification and advice *before the deadline*.

Contacts: overall or planetary questions: Nigel Sharp, nsharp@nsf.gov, 703-292-4905; primarily Galactic, Brian Patten, bpatten@nsf.gov, 703-292-4910; generally extragalactic, Linda Sparke, lsparke@nsf.gov, 703-292-4899.

#### New Grant Proposal Guide Coming

NSF expects to issue a new version of the Grant Proposal Guide early in FY2009. The new GPG will take effect for all proposals submitted after 1 January 2009. Submissions to the November 2008 ATI and AAG deadlines will not be affected by the new guidelines, but PI's should be aware that there are expected to be some significant changes in proposal requirements. The current and updated versions of the GPG can be found at www.nsf.gov/publications/pub\_summ. jsp?ods\_key=gpg.

# News from the Astronomical Society of the Pacific (ASP)

James Manning, Executive Director

### Making Ready for IYA

The clock is ticking down to the start of a singular year—the 400th anniversary year of Galileo's first peep at the heavens through a telescope, and the subsequent revolution in astronomical discovery that it sparked. It will provide a remarkable opportunity to shine a spotlight on astronomical endeavors of all sorts, and how they season our view of the universe and enhance our understanding of our place within it. We will want people to look up, and to take note.

Are you ready?

Are you getting ready?

One of the important goals of the International Year of Astronomy (IYA) Symposium conducted by the Astronomical Society of the Pacific (ASP) at the American Astronomical Society (AAS) meeting in St. Louis this past June was precisely to help people do just that: find out what was up, share what they were planning, and help each other to get ready for an opportunity to raise astronomy awareness, improve public understanding, and enhance science education and outreach with IYA themes. If you attended the AAS meeting, I hope you had a chance to participate in some of those sessions.

If not, or if you could not attend all that you wished, all is not lost. The ASP is preparing a proceedings volume of the presentations, orals, posters, panels and workshops offered during the symposium and the workshop sessions that preceded it, to serve as a useful reference on all things IYA as presented at the meeting. The volume will include a resource section to help us all make the connections and use the arsenal of Web sites. Listed are materials, programs, experts, events and networks that can ideally turn a global celebration of astronomical discovery into sustainable improvements in public interest, science education, and support for science research around the world.

If you would like to obtain a copy of this useful reference for the upcoming year, you can find both a basic description and ordering information at the following ASP Web page: www. astrosociety.org/2008proceedings.html. The proceedings is expected to be published by and shipped in December so that it is available to you right from the start of 2009. Order now and you can still obtain the volume at the pre-publication price—check the Web page for details.

This can be a important year for all of us involved in astronomy research, education and outreach—a chance to get the public's attention and to create a public perception the value of our work that can be supportive of that work continuing, and can aid the goal of producing, ultimately, a more scientifically attuned and literate society. To the degree that the IYA Symposium and its proceedings can assist you in your personal and collaborative efforts to make it so, we hope you will take advantage. Check it out!

### Washington News continued from back page

Visits, which I wrote about in my last column. About 20 astronomers around the country volunteered to make visits to District/Regional offices of House and Senate members during the summer "district work period." As of this writing, five appointments have occurred, and others are still working to hear back on the final scheduling of their appointments. This is our first effort at doing visits locally, so I hope it will prove effective and interesting to the members who are participating. I'll write more about the visits in my next column, once they are completed.

### **International Year of Astronomy**

On 9 July, the United States House of Representatives spent about 15 minutes debating and passing House Concurrent Resolution 375, To Honor the Goal of the International Year of Astronomy. The resolution was offered by Rep. Gabrielle Giffords (D-AZ). Rep. Giffords, along with Rep. Nick Lampson (D-TX) and Tom Feeney(R-FL) all spoke about the measure on the House floor. The AAS is very grateful to Rep. Giffords, her staff, and the staff of the House Science & Technology Committee for their assistance in passing this measure.

The resolution now moves to the Senate. It was scheduled for markup by the Commerce, Justice, and Science committee in July, only to have the session postponed. We hope it will make it through markup when the Senate reconvenes, and then pass by unanimous consent decree sometime in September or October. You can find a link to the the full resolution text by searching the AAS public policy blog, at blog.aas.org.

#### Elections

Election Day is fast approaching, with the entire House, one-third of the Senate, and the White House up for grabs. Conventional wisdom is projecting the Democrats will increase their majorities in the House and Senate. The beltway institution Cook Political Report, as of my writing, projects the Democratic Party will gain between 12 and 17 House seats, and 5 to 7 Senate seats, while calling the race for the White House a toss-up.

One group doing its part to inform the public on candidates' positions on science issues is Scientists and Engineers for America. They have developed a web-site/wiki to track various science-policy and related issues and post relevant candidate statements and positions on these topics. You can view the site and contribute at http://sharp.sefora.org

I encourage all AAS members to register and vote for the candidates of your choice on 4 November.

# Honored Elsewhere

### Fazio Receives 2008 COSPAR Award

Giovanni Fazio received the 2008 Royal Society of London/ COSPAR Massey award for outstanding contributions to space science. This award recognizes outstanding contributions to the development of space research, interpreted in the widest sense, in which a leadership role is of particular importance.

Fazio is presently Senior Physicist, Harvard-Smithsonian Center for Astrophysics; Lecturer, Astronomy Department, Harvard University; and a Faculty Member, International Space University, Strasbourg, France. He received BS (Physics) and BA (Chemistry) degrees from St. Mary's University, Texas, in 1954, and a Ph.D. (Physics) from the Massachusetts Institute of Technology in 1959, having done his graduate work in elementary particle physics. The same year, he joined the Physics Department, University of Rochester, where he pioneered the development of gamma-ray astronomy using balloon-borne telescopes and was the Co-Principal Investigator for the gamma-ray detector experiment on NASA's first Orbiting Solar Observatory.

Fazio is the past chairman of the HEAD (High Energy Astrophysics Division). He is a Fellow of the American Physical Society and past chairman of its Astrophysics Division, a Fellow of the American Association for the Advancement of Science (AAAS). He is also a member of the International Astronomical Union, the Optical Society of America, and a Fellow of the Royal Astronomical Society.

**Lonsdale Assistant Director for NRAO'S NAASC** Carol J. Lonsdale will replace Chris Carilli as Assistant Director for the North American ALMA Science Center (NAASC) at the NRAO, effective 1 October 2008. She will be located at the NAASC in Charlottesville. Chris Carilli has been appointed Chief Scientist of the NRAO.

In this position, Lonsdale will be responsible for the overall development and operation of the NAASC, providing scientific leadership, supporting and fostering optimal use of ALMA by the North American science community, and supervising education and outreach activities related to ALMA in coordination with the Director.

Currently Principal Scientist at the University of Virginia, Department of Astronomy, Lonsdale brings a strong background of project leadership from more than 20 years at CalTech, where she has led various teams, including science user support, user softeware development, archive development and proposal reviews, and headed the Science Staff for many years. In addition, she served as Science Operations Manager for the NASA Wide area Infrared Explorer (WIRE).

# Gurton Receives 2008 AANC Professional Award

Suzanne Gurton, the Education Manager at the Astronomical Society of the Pacific (ASP), has received the 2008 Professional Award, given each year by the Astronomical Association of Northern California to an astronomer who has done outstanding work in distinguishing and fostering amateur astronomy.

Gurton has been an astronomy educator at the ASP for eight years, creating and writing activities, holding workshops for a wide range of educators, and, more recently, managing the staff of the entire education department at the 120year old Society. She has spearheaded several major national educational initiatives that benefit the amateur and educational communities in astronomy

Before joining the ASP, Gurton was an educator at the Griffith Observatory, Fiske Planetarium, Hayden Planetarium, and Santa Fe Community College (where she established the new planetarium as a community resource.) She was named a Fellow of the International Planetarium Society in recognition of a lifetime of contributions to planetarium education in 2008.

# Announcements

### **2009 Online Membership Renewals**

The 2009 renewal period is here! Be an early bird and renew online today. Renewing early saves the AAS substantial cost and increases the funding available for our programs. If you need assistance, please email membership@aas.org, or call 202-328-2010 x 101.

### Lowell Observatory's Predoctoral Scholar Fellowship Program

Lowell Observatory is pleased to solicit applications for our Predoctoral Scholar Fellowship Program. Now beginning its third year, this program is designed to provide unique research opportunities to graduate students in good standing, currently enrolled at PhD granting institutions. Several projects are available in collaboration with Lowell staff astronomers; we anticipate the availability of an increasing variety of projects over the next year as construction of our new 4.2 meter Discovery Channel Telescope and corresponding instrumentation progresses. Student research is expected to lead to the completion of a thesis dissertation appropriate for graduation at the doctoral level at the student's home institution. Currently, three students are enrolled in our program. The Observatory provides competitive compensation and full benefits to student scholars. For more information, see www.lowell.edu/rsch/predoc.php and links therein. Applications are due by 1 December 2008.

### Study Astronomy/Astrophysics in India -Summer 2009

The program is administered by the National Solar Observatory (NSO), sponsored by the National Science Foundation's (NSF) Office of International Science and Engineering (OISE), and is open to US graduate students in any discipline of astronomy or astrophysics who are US citizens or permanent residents, age 21 years or older, and have a passport. Now in its second year, the main goal of the program is to expose potential researchers to an international setting at an early stage in their careers. The program will take place in Bangalore, India, under the auspices of the Indian Institute of Astrophysics (IIA), a premier national center devoted to research in astronomy, astrophysics and related physics.

The program will support four full-time summer research positions for eight weeks starting 10 June 2009. For each participant, the program will provide round-trip air-coach travel to and from Bangalore, India, a stipend of \$500 US per week, accommodation, miscellaneous travel (field) and incidental expenses, and medical expenses and insurance.

Additional information and application materials are available on the web at http://eo.nso.edu/ires/. All application materials must be received by 16 January 2009.

### Portal to the Universe

The International Year of Astronomy Cornerstone Project "Portal to the Universe" (PTTU) seeks information on all RSS based astronomy content feeds (Blogs / Podcasts / Vodcasts / etc) and embedable widgets.

The Portal to the Universe seeks to become a one stop shop for finding online astronomy content, including news, blogs, pod/vodcasts, image feeds, and astronomy related widgets. We will not be creating content - we will be showcasing content from the community. Details on the Portal to the Universe can be found here: www.astronomy2009. org/cornerstone-projects-mainmenu-80/the-portal-to-theuniverse-mainmenu-85.html

We are set to go into beta on 1 December 2008, and to make that launch a success we are working to index all blogs pod/vodcasts, image feeds and other new media content. If you are a new media content provider and would like your content included in the beta release of PTTU, can you please contact Pamela L. Gay at pamela@starstryder.com with the following:

To appear on PTTU -Site Name: URL: RSS Feed: The byline is: Tagline (1-sentence description is): This site is [Clean] [Explicit] [Somewhere in between]

For office use only -The correct contact person is: The correct contact email is:

We will also be building a yellow pages of astronomy, including all astronomy community participants, from machinists building mounts to artists creating space related jewelry and all the observatories, vendors, and science centers in between. If you would like to be notified when online forms are available to sign up to be in the directory, please also email pamela@starstryder.com

# Call for Arecibo Observing Proposals

1 October is the current deadline for submitting new proposals to use the Arecibo 305 m telescope, for activity in the two trimesters starting 1 February 2009. Receivers are available for frequencies from 1.1-10 GHz, as well as at selected lower frequencies. In particular we have just commissioned a new cryogenic 327 MHz receiver. The WAPP spectrometer provides an 8-band dual-polarization, single-pixel observing capacity. For receivers that support the bandwidth, this mode can be used to place 8 simultaneous bands of up to 100 MHz bandwidth each within a 1-GHz band as desired (can cover 680 MHz of contiguous spectrum without filter roll-off.) This capacity has recently been used to detect many molecular lines efficiently from ULIRGs.

General information for proposers is located at www.naic. edu/science/proposals\_set.htm

# **Exoplanet Task Force of the AAAC**

The report of the Exoplanet Task Force of the Astronomy and Astrophysics Advisory Committee is now available on the NSF website at www.nsf.gov/mps/ast/aaac.jsp.

The report is a comprehensive study of the search for and study of planets around other stars (exoplanets). The young but maturing field of exoplanets is perhaps one of the most compelling fields of study in science today—both because of the discoveries made to date on giant planets around other stars, and because the detection of planets just like our Earth ("Earth analogs") is at last within reach technologically. In the Report we outline the need for a vigorous research program in exoplanets to understand our place in the cosmos: whether planets like our home Earth are a common or rare outcome of cosmic evolution. The strategy we developed is intended to address the following fundamental questions, in priority order, within three distinct 5-yr long phases, over a 15 year period:

- 1. What are the physical characteristics of planets in the habitable zones around bright, nearby stars?
- 2. What is the architecture of planetary systems?
- 3. When, how and in what environments are planets formed?

The Report recommends a two-pronged strategy for the detection and characterization of planets the size of the Earth. For stars much less massive and cooler than our Sun (M-dwarfs), existing ground-based techniques including radial velocity and transit searches, and space-based facilities both existing and under development such as Spitzer and JWST, are adequate for finding and studying planets close to the mass and size of the Earth. Conducted in parallel with the M-dwarf strategy is one for the more challenging observations of the hotter and brighter F, G, and K stars, some of which are very close in properties to our Sun, in which the frequency of Earth-sized planets is assessed with Corot and Kepler, but new space missions are required for detection and study of specific Earth-mass and Earth-sized objects. Our Task Force concludes that the development of a space-based astrometric mission, narrowly-focussed to identify specific nearby stars with Earth-mass planets, followed by direct detection and study via a spaceborne coronagraph/ occulter or interferometric mission, is the most robust approach to pursue. Ground and space-based microlensing programs pursued in parallel would provide complementary information on planetary system architectures on galactic scales.

The program for F, G, and K stars must be preceded, at the beginning of the strategy, by broad yet detailed technical assessments to determine whether the astrometric and direct detection technologies will be ready in the time frames envisioned (the second and third 5-yr periods, respectively). Also measurement of dust around nearby candidate stars must be undertaken early to determine whether typical systems are clean enough to make direct detection feasible. Alternative strategies are discussed should problems arise in any of these areas.

Finally, the Task Force lays out recommended programs in ground-based observations of larger planets, of planetforming disks, and theoretical and laboratory studies crucial to interpreting and understanding the outcome of the planet search and characterization observations.

Comments from AAS members are welcome and should be directed to the Task Force Chair, Jonathan Lunine, at jlunine@lpl.arizona.edu.

# Calendar

# AAS & AAS Division Meetings

### 213th AAS Meeting

4-8 January 2009, Long Beach aas.org/meetings/

### HAD Meeting

6-7 January 2009, Long Beach, CA aas.org/had/meetings/

### SPD Meeting

14-18 June 2009, Boulder, CO spd.aas.org/navbar\_meetings.html

### **HEAD Meeting**

1-4 March 2010, Big Island, HI Contact: John Vallerga (info@eurekasci.com) www.confcon.com www.hiltonwaikoloavillage.com/

# **Other Events**

#### Astronomical Data Analysis Software and Systems XVIII (ADASS XVIII)

2-5 Nov 2008, Quebec City, Canada Contact: Daniel Durand (daniel.durand@nrc.-cnrc.gc.ca)

#### Hot and Cool: Bridging Gaps in Massive Star Evolution

10-12 November 2008, Pasadena, CA Contact: Claus Leitherer (leitherer@stsci.edu) www.ipac.caltech.edu/hotandcool/

#### Galaxy Evolution: Emerging Insights and Future Challenges

11-14 November 2008, Austin, TX Contact: Shardha Jogee (sj@astro.as.utexas.edu)

# Solar Activity During the Onset of Solar Cycle 24

7-12 December 2008, Napa, CA Contact: Hugh Hudson (solar24@ssl.berkeley.edu) sprg.ssl.berkeley.edu/RHESSI/ napa2008

#### 24th Texas Symposium on Relativistic Astrophysics

7-14 December 2008, Vancouver Contact: Ludovic van Waerbeke (texas2008@phas.ubc.ca) texasinvancouver.org

#### \*Miami 2008 Topical Conference on Elementary Particles, Astrophysics, and Cosmology 16-21 December 2008, Fort Lauderdale, FL Contact: Thomas Curtright (curtright@physics.miami.edu) http://server.physics.miami. edu/~cgc/Miami2008.html

# Formation and Evolution of Globular Clusters

12-16 Jan 2009, UC Santa Barbara Contact: Fred Rasio (rasio@northwestern.edu) kitp.ucsb.edu/activities/auto/?id=953

#### \*Essential Cosmology in the Next Generation 12-16 Jan 2009, Los Cabos, Mexico

Contact: Berkeley Center for Cosmological Physics (bccpcabo@lbl.gov) http://bccp.lbl.gov/beach\_program

#### \*Aspen 2009 Winter Conference - Understanding the Dark Sector:

Onderstanding the Dark Sector
Dark Matter and Dark Energy
25-31 January 2009, Aspen, CO
Contact: Rachel Bean
(rbean@astro.cornell.edu)
www.astro.cornell.edu/~rbean/
Aspen/AspenCosmo.html

#### \*Wild Stars in the Old West II: The 14th North American Workshop on Cataclysmic Variables and Related Objects 15-19 March 2009, Tucson, Arizona Contact: Steve B. Howell (howell@noao.edu) www.noao.edu/meetings/wildstars2/

The Search for Life in the Universe 4-7 May 2009, Baltimore, MD Contact: Marc Postman (postman@stsci.edu)

#### CASCA 2009: Annual Meeting of the Canadian Astronomical Society 26-29 May 2009, Toronto, Canada Contact: Ray Jayawardhana (rayjay@astro.utoronto.ca) astro.utoronto.ca/casca09

#### \*The Monster's Fiery Breath: Feedback in Galaxies, Groups, and Clusters

1-5 June 2009, Madison, WI Contact: Sebastian Heinz (feedback@astro.wisc.edu) www.astro.wisc.edu/feedback Unveiling the Mass: Extracting and Interpreting Galaxy Masses, and a Celebration of Vera Rubin's Career 15-19 June 2009, Kingston, Ontario Contact: Stephane Courteau (courteau@astro.queensu.ca)

#### Galaxy Wars: Stellar Populations and Star Formation in Interacting Galaxies

19-22 July 2009, Johnson City, TN Contact: Beverly Smith (smithbj@etsu.edu) etsu.edu/physics/wars/wars.html

### Particle Acceleration in

Astrophysical Plasmas 27 July-2 Oct 2009, Santa Barbara, CA Contact: Don Ellison (don\_ellison@ncsu.edu) www.kitp.ucsb.edu/activities/ auto/?id=963

#### \*Optical Engineering + Applications 2009 - Part of SPIE Optics + Photonics

2-6 August 2009, San Diego, CA customerservice@spie.org http://spie.org/Optical-Engineering. xml?WT.mc\_id=RCALENDARW

#### **Ten Years of Science with Chandra** 22-25 Sept 2009, Boston, MA Contact: Harvey Tananbaum (ht@cfa.harvard.edu)

\*New or revised listings

Note: Listed are meetings or other events that have come to our attention. 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 crystal@aas.org. Meetings that fall within 30 days of publication are not listed.

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



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

Newsletter 142 September/October 2008

Periodical Postage Paid Washington DC

# Washington News

Marcos Huerta, John Bahcall Public Policy Fellow huerta@aas.org



August is a sleepy month here in Washington, with the Congress in recess and members in their home states or otherwise out of town. That is, with the exception of a group of House Republicans who have been staging protests and giving speeches on an otherwise empty House floor demanding a vote for expanded oil drilling.

#### Recess

The House and Senate are both in recess until 5 September. 30 September marks the end of the 2008 fiscal year and theoretically would mean that the new Fiscal Year 2009 budget has been passed. However, in reality there will be a continuing resolution passed by 1 October, funding the federal government at the current levels. Most likely such resolutions will last all the way into a new administration in January. There has been some talk amongst Congressional Republicans of holding up a vote on a continuing resolution unless they are not allowed to vote on drilling. That would lead to a government shutdown; the first since 1995. However, it is unlikely either side wants a government shutdown a month before the November elections.

### FY 2008 Supplemental

President Bush signed into law a \$257.5 billion supplemental funding bill in the end of June. In my last column, it was unclear if significant domestic spending would survive in the final bill amidst negotiations between the House, Senate, and White House. Ultimately, the bill included \$337.5 million for science. That number includes \$62.5 million each for the National Science Foundation, NASA, and the Department of Energy Office of Science, and also \$150 million for the National Institutes of Health.

#### **Bahcall Fellowship and Congressional Visits**

One year ago, my predecessor, Jeremy Richardson, wrote his farewell column in the September/October newsletter because in 2007 the Bahcall fellowship lasted only six months. Jeremy moved on to the AAAS Global Stewardship Fellowship which began in September of 2007. However, starting with the 2008 fellowship, the position is now for one year (with a renewable option). I feel that I am just starting to get the hang of both DC and my job here at the AAS, and I am looking forward to continuing as the fellow.

With my longer tenure here at the AAS, I have been able to organize our new initiative of summer Local Congressional