

2017

Annual Report



MISSION & VISION STATEMENT

The mission of the American Astronomical Society is to enhance and share humanity's scientific understanding of the universe.

The Society, through its publications, disseminates and archives the results of astronomical research. The Society also communicates and explains our understanding of the universe to the public.

The Society facilitates and strengthens the interactions among members through professional meetings and other means. The Society supports member divisions representing specialized research and astronomical interests.

The Society represents the goals of its community of members to the nation and the world. The Society also works with other scientific and educational societies to promote the advancement of science.

The Society, through its members, trains, mentors, and supports the next generation of astronomers. The Society supports and promotes increased participation of historically underrepresented groups in astronomy.

The Society assists its members to develop their skills in the fields of education and public outreach at all levels. The Society promotes broad interest in astronomy, which enhances science literacy and leads many to careers in science and engineering.



CONTENTS

- 4 PRESIDENT'S MESSAGE
- 6 EXECUTIVE OFFICER'S MESSAGE
- 8 MEMBERSHIP
- 9 PUBLISHING
- 10 AAS & DIVISION MEETINGS
- 12 PUBLIC POLICY
- 14 DIVISIONS, COMMITTEES & WORKING GROUPS
- 15 EDUCATION & OUTREACH
- 16 MEDIA RELATIONS
- 18 FINANCIAL REPORT
- 20 PRIZEWINNERS
- 21 DONOR RECOGNITION
- 23 INSTITUTIONAL SPONSORS
- 24 IN MEMORIAM
- 24 AAS BOARD OF TRUSTEES & STAFF

As I end my term as AAS President and take on the duties of AAS Past-President, I want to first thank the many people who made all that we have accomplished possible. I would especially like to thank the members of the Board of Trustees and the Strategic Assembly, everyone in the AAS office (especially Kevin Marvel and Joel Parriott), and the volunteers of our many committees. I am particularly grateful to the chairs and members of CSWA, CSMA, SGMA, and WGAD for their help and wise counsel as we have moved to make the AAS more diverse and inclusive. In addition, I thank Bob Kirshner for suggesting that I join all six AAS Divisions, so I would receive their email announcements and keep up with their activities. Finally, I would also like to thank my family, especially our daughters, who are far more savvy with Keynote than I am, for their help and patience as I prepared my opening welcome address for each AAS meeting (aka "Christine's Guide to the AAS Meeting").

My term as AAS President was both exciting and challenging.

Nearly my first official duty as AAS President was to [testify before Congress](#). In mid-June 2016, I traveled to the Aspen Center for Physics to participate in a workshop and write a paper on supermassive black holes. Just after my arrival, I received a phone call, followed by an email, from a US House of Representatives subcommittee staffer asking if I could testify before a joint hearing of the Subcommittee on Space and the Subcommittee on Research and Technology on 12 July. The Aspen workshop was scheduled to end on 10 July. I agreed to testify and provide written testimony, which would become part of the congressional record. A few colleagues helped enormously by providing essential input to the written testimony, which at about 10 pages, including figures, was the only paper I finished during my time at Aspen!

I have been guided in how the AAS should be led by the recommendations of the Governance Task Force chaired by former President David Helfand, which were unanimously approved in 2017 by the AAS Council and then by the AAS membership. These recommendations significantly changed how the AAS is governed. In particular, all the members of the former Council, now renamed the Board of Trustees, would be included in all key decisions made on behalf of the AAS. Previously the 20-member Council met face-to-face only twice each year, during the two days before the summer and winter AAS meetings. Between those two meetings, the five-member Executive Committee of the Council had two additional face-to-face meetings, in the fall and in the spring. When an issue arose that needed a decision before the next meeting of the full Council, it was made by the Executive Committee. Under our new governance rules, the Board of Trustees (which will gradually shrink to 11 members) meets monthly, either face-to-face or by telecon. This involvement of Board members means that the Board is now much more engaged in the issues facing our Society. I thank all our Board members, many of whom were elected before the change in governance, for taking on this new, larger, and far more time-consuming role.

Another very important undertaking of the AAS was carried out by the 11-member AAS Education Task Force chaired by AAS

Education Officer, Charles Liu. This task force was charged, by then President Meg Urry in 2016, to survey the current education-related activities and the needs of the astronomical community, then to develop a coordinated education strategy for the Society and to recommend to the AAS Council (now Board) a prioritized portfolio of education-related activities for the Society to pursue. The [AAS Education Task Force report](#) provides a comprehensive review of the information they collected and makes a series of recommendations for K-12, undergraduate, and graduate education. More recently, at the January 2017 Council meeting, we formed the [AAS Task Force on Diversity and Inclusion in Graduate Astronomy Education](#). The report of this task force will be delivered and discussed at the January 2019 AAS Board meeting in Seattle.

To involve the broader AAS community in setting strategic directions for our Society, the Board, along with the chairs of the 11 standing committees and representatives from the Divisions meet for a Strategic Assembly, generally on the day just prior to the winter and summer AAS meetings. The overall goals of the Strategic Assembly are to monitor the Society's progress toward specific goals in our strategic plan, and to review the projects and programs of the Society to be sure they are aligned with and support our goals and mission. However, during our most recent Strategic Assembly at the 2018 summer meeting in Denver, most of the discussion was centered on the AAS Code of Ethics, our anti-harassment policies and the handling of complaints involving our journals, and examining whether any modifications should be made to these policies and processes.

The years 2017 and 2018 have been outstanding for astrophysical discoveries, and as I write this, we are only half way through 2018! Certainly, one of the highlights of 2017 was the awarding of the Nobel Prize in Physics to LIGO founders Rainer Weiss, Kip Thorne, and Barry Barish for the direct detection of gravitational waves.

Many of the most exciting, new scientific results of the last two years were first presented at AAS meetings. I'd like to mention just a few. At AAS 231 in National Harbor, these included the spectacular Juno images of Jupiter presented by Scott Bolton (Southwest Research Institute) in the opening Kavli Lecture and new views of Venus described by Annette Ferguson (Univ. of Edinburgh). Three plenary talks focused on the detection of gravitational waves: the Rossi Prize lecture by LIGO spokesperson Gabriela Gonzalez (Louisiana State Univ.) announced the detection of gravitational waves in September 2015 by the LIGO and Virgo Collaborations, the Lancelot Berkeley Prize lecture by Peter Fritschel (MIT) described the instruments that launched gravitational-wave astronomy and the plenary lecture "Illuminating Gravitational Waves" by Mani Kasliwal (Caltech) described the multiwavelength emission detected from the merging neutron stars that produced the gravitational-wave event GW170817. At AAS 231, we also learned much more about stellar evolution and galaxies in the plenary lectures by Lars Bildstein (Univ. of Colorado) and Charlie Conroy (Harvard Univ.). Nick Kaiser (Univ. of Hawaii), Adam Reiss (Johns Hopkins Univ.), and Larry Rudnick (Univ. of Minnesota)

presented new results on clusters of galaxies and cosmology. On the last afternoon of the meeting, David Goldston (MIT) discussed “The Politics of Science Funding,” which was certainly food for thought for many astronomers.

The AAS 232 summer meeting brought us great new science results, from exosolar planets to supermassive black holes, all in the wonderful setting of downtown Denver, with its pedestrian malls and many restaurants. AAS 232 also expanded our use of iPosters. Instead of the traditional poster that is printed, brought to the meeting, and thumbtacked to a display board for one day, iPosters are digital and interactive. They are uploaded to large display screens where they can be available for viewing during any day of the AAS meeting. In the future, poster presenters should consider using iPosters, which allow dynamic graphics and video.

On the first morning of the summer meeting, Debra Fischer (Yale) presented the Kavli Lecture “From Extrasolar Planets to Exo-Earths.” The AAS Laboratory Astrophysics Division (LAD) hosted a meeting-in-a-meeting “Bridging Laboratory and Astrophysics.” This included a Plenary lecture, “Small Interstellar Molecules and What They Tell Us” by David Neufeld (Johns Hopkins). The Newton Lacy Pierce Prize lecture was presented by Evan Kirby (Caltech) on dwarf galaxies as laboratories for nucleosynthesis and chemical evolution.” Thomas Rimmele (NSO) described the building of the Daniel K. Inouye Solar Telescope and forthcoming scientific investigations of our Sun’s magnetic activity. Keivan Stassun (Vanderbilt Univ.) described the precision astrophysics used for exoplanets, stars and the Milky Way, while Nicholas Watson (Univ. of Cambridge) described new results from the second data release of GAIA, launched by ESA in December 2013 to create a three-dimensional map of the Milky Way galaxy. The Hale Prize lecture, given by Sarbani Basu (Yale) was “Amazing Journeys to the Hearts of Stars.”

AAS 232 presentations on extragalactic topics included Allison Coil (UCSD) on the relationship between galaxies and large scale structure, Gurtina Besla (Univ. of Arizona) on the dynamics of the Local Group in the era of precision astronomy, and Julie Comerford (Univ. of Colorado) on supermassive black hole fueling and feedback in galaxies. If you missed any of the plenary presentations, you can watch the videos linked from the meeting pages.

Looking toward the future, planning for Astro2020, the Decadal Survey on Astronomy and Astrophysics, has begun. As noted on the [National Academies’ website](#), the “goal of a decadal survey is to consider the past and current research of the field and provide consensus recommendations for the direction of the field over the next decade.”

As in the past, the Decadal Survey will review possible new initiatives and serve as a guide for policy makers, agencies, scientists, and the public. Recently the Committee on Astronomy and Astrophysics (CAA) issued a call to the astronomy and astrophysics community for science white papers in [eight thematic areas](#). These white papers should be submitted between 7 and 18 January 2019.

Also of note, two large consortia, the Giant Magellan Telescope Organization (GMTO) and the Thirty Meter Telescope International Observatory (TIO), both planning to build 30-meter-class ground-based optical/infrared telescopes, recently agreed to work together to seek funding from the National Science Foundation so that the entire American astronomical community can have access to these next-generation facilities.

A report on the astronomy activities of 2017 would be incomplete without a mention of the 2017 total solar eclipse. I hope many of you had the opportunity to view this wonderful and extraordinary event. Although I had attempted to see the 1972 eclipse in Nova Scotia, it was very cloudy and later rained hard (and three of us were sleeping in a tent!), so the 2017 total solar eclipse was the first one I saw. I experienced it during the HEAD meeting in Sun Valley, Utah from a hilltop near the meeting site, surrounded by friends and colleagues. It was fantastic, both literally and figuratively, a high point of my AAS presidency!

I wrote much of this report while on Cape Cod for a July weekend. I remember how, in my term as AAS President, sometimes when we were on vacation, I would go to the Wellfleet library and, with the librarian’s permission, sit there Skyping with members of the Board or AAS committees. Now, as Past-President, I’m looking forward to spending more time near the ocean and less in the library. One of the accompanying photos is me, from that July weekend, just finishing a good ride on one of our kids’ boogie boards.



KEVIN B. MARVEL

EXECUTIVE OFFICER'S MESSAGE



NEW GOVERNANCE MODEL

2017 was a year of change for the AAS. The recommendations of the Governance Task Force led by Past President David Helfand became reality as the Council approved new articles of incorporation and bylaws mid-year. The Council passed out of existence with the Board of Trustees standing up to take its place. The new Strategic Assembly, composed of the Board of Trustees, the chairs of our Divisions and the chairs of our core committees, also met for the first time in October to define its role and begin the difficult task of undertaking strategic planning. The Board began meeting monthly by teleconference and all the trustees felt more connected and engaged with the regular operations of the organization. The Board now meets four times face to face, once at each AAS conference, once in the spring and once in the fall.

Why the change? Our old governance model combined with our ever-increasing level of activity resulted in the Executive Committee making a lot of the key decisions apart from the Council, as when the Council does not meet, the Executive Committee had full authority to act. The new model ensures greater engagement of the full Board in setting policy and making decisions for the organization. It will take time to get the kinks worked out of the system, but I am sure that the end result will be positive for our organization. Additionally, the number of Trustees will begin decreasing in 2018 for a few years taking our total Board member count from 19 to 11 by 2020. This should help with efficiency, and it will also increase the level of responsibility, and hopefully engagement, of each Trustee. Elections will be more important than ever. Another core recommendation of the Governance Task Force was the creation of new membership categories. The new categories will be rolled out for the 2019 renewal period, beginning in early fall 2018. The Full Member category will be relabeled Member. The Junior Member category will be split into high school/undergraduate and graduate categories. Two new affiliate classes will also be created. The Amateur Affiliate membership class will be a low cost option for amateur astronomers interested in research astronomy to join our organization formally. Going forward, the summer meeting will include content targeted toward amateurs and we are hopeful we can draw additional exhibitors that appeal to amateur astronomers as well. The Alumni Affiliate membership class will be open to any individual who pursued an education in research astronomy, but whose career has taken them into other directions. Working with our volunteer leaders, we will develop content at our meetings, online and perhaps in print that would appeal to our astronomy Alumni, many



NEW MEMBERSHIP CATEGORIES

of whom have told me how much they value AAS NOVA, our highlights journal published fully online and free for all to read.

Our journals continued to perform well. It always surprises me that many in our community do not know that the AAS owns and manages the *Astrophysical Journal*, *Astrophysical Journal Letters*, *Astrophysical Journal Supplement Series*, and *Astronomical Journal*. Although we did not found any of these titles, they were given to us to manage over time because the organization was deemed to be the proper caretaker for these important journals.

We operate the journal fully with a non-profit mindset and set our rates at levels sufficient for our direct and indirect costs of production, while setting aside enough funds over time to ensure smooth operation in times of crisis. The Society formally named Ethan Vishniac the Editor in Chief of all our journals in 2017. Ethan had served in this role in a temporary capacity after the journals editorial hierarchies were combined. An open search resulted in him being named permanently to the position. He has hit the ground running with several new ideas and initiatives to capitalize on the implemented recommendations of our Journals Task Force from a few years ago. One such idea is the revitalization and relaunch of the Bulletin of the American Astronomical Society or BAAS. 2018 and 2019 will be active years for our journals. It is important to point out that in 2017 we established a new Gold Open Access rate for publishing in our journals. Authors who opt to (or are forced to) publish using Gold Open Access can now do so in the AAS titles. Our GOA rate is lower than nearly all journals in our discipline. We will be advertising this new rate more aggressively in the near future to make sure that authors know where the most cost-effective open access route to publication lies in the astronomical sciences.

I would also like to point out that our journals business model includes both author fees and subscription revenue. This model is quite robust and equitably shares the expense of publication and consumption among the users and consumers of the journals, keeping costs down for all. Journals that rely only on subscription revenue will, if they are popular, inevitably run into tough financial times as they have no revenue that scales with submitted content, even though their costs do scale with submitted content. Their subscription rates must grow significantly over time, putting undue financial stress on the library community, who, at least currently are suffering grave

financial challenges. Alternately, they will have to reject a larger fraction of papers submitted to keep the overall volume of content they process restricted, whether justified scientifically or not.

On the other hand, journals that only charge authors, whether open access or not, burden authors with the full cost of peer review, publication, and dissemination. By restricting our proprietary period to the US government recommended 12 months, we can charge subscribers a reasonable rate to cover

in the BAAS eventually. Our Divisions all had dynamic, exciting conferences in 2017. The DPS met in Provo, Utah; the HEAD met in Sun Valley, Idaho; the SPD met in Portland, Oregon; the DDA met in London, England; and, as usual, the LAD met with the Society at its summer meeting and the HAD met with us at both of our annual conferences. The Division meetings are dynamic, exciting venues for focused presentations and discussion. In 2017 the HEAD and SPD took this to the limit by scheduling their conferences in line with the total solar eclipse. Attendees at both



the cost of resources they utilize, keeping author costs down. All of our content is open after 12 months, something that subscription-only journals cannot generally offer, as they must preserve access value in order to charge large subscription rates. We believe the model remains strong in today's environment and provides flexibility if either community suffers financial hardship, while serving the broadest possible set of authors and subscribers. I note also that AAS members can get their own personal subscription to all of the AAS Journals' content for a mere \$25.

The Society met in Texas twice in 2017. The winter meeting was held in Grapevine and the summer meeting in Austin. Both meetings were exciting scientifically and performed well financially, with the Austin meeting being a bit smaller than expected. After the summer meeting the AAS, in partnership with NRAO, organized the Women in Astronomy IV meeting. Many good speakers and excellent networking among the attendees will lead to the production of white papers, which we hope will appear

venues had nearly perfect weather conditions. Suggestions were immediately submitted to our office to schedule all conferences in conjunction with eclipses and we may be able to deliver on this in 2024 when an eclipse will track north eastward across the United States on 8 April. We are already exploring meeting venue locations within striking distance of the center line, so stay tuned!

This annual report only allows us to share with you a fraction of your Society's activities. Our staff, elected leaders, and engaged volunteers work together to accomplish a lot every year...too much for this "slim" volume. Our mission is a powerful one: To enhance and share humanity's scientific understanding of the universe. Having been Executive Officer for twelve years (as of September 2018), I am amazed at what our organization has accomplished and appreciate the AAS staff, our members, and especially our elected leaders who do so much for the Society in ways that most members do not fully appreciate. Keep looking up!

MEMBERSHIP

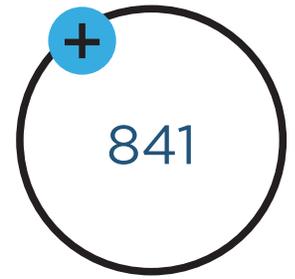
With more than 5,700 members in the US and more than 800 based elsewhere, the AAS membership is geographically diverse, with many members. The AAS is proud to draw members from countries all around the world as astronomy is clearly a global endeavor that knows no borders... after all, one sky connects us all.

Of course, we know that by growing our membership internationally through, for example, our International Affiliate membership class, we can expand the diversity of our membership to better represent the global astronomical enterprise. Already, many of our services know no boundaries, such as the AAS Job Register, AAS Wall Calendar, and AAS Membership Directory, and we work actively to ensure a focus in these publications beyond just North America. The directory, for example, is recognized as the most comprehensive and accurate listing of international astronomy institutions, and we are working with the International Astronomical Union to ensure that our list and theirs are consistent, accurate, and complete.

Our journals draw authors from all across the globe, and our meetings are showing steadily increasing participation from astronomers working outside North America. We need this diversity to achieve our core mission to enhance and share humanity's scientific understanding of the universe.



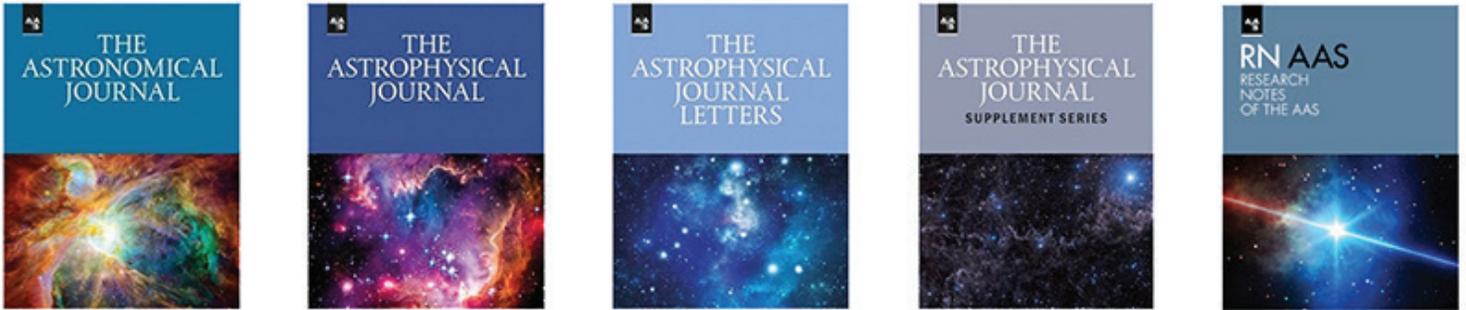
US MEMBERS



NON-US MEMBERS

CA	1013	NJ	96	PR	22
MD	635	WI	81	WY	19
MA	454	IN	75	KS	18
AZ	359	CT	67	NV	17
NY	286	TN	64	AR	16
TX	258	MN	51	ID	15
CO	216	AL	49	ME	15
VA	216	NC	47	MT	14
PA	197	OR	43	DE	12
IL	153	MO	42	NE	12
NM	146	UT	36	VT	12
FL	140	NH	35	RI	10
MI	130	SC	30	ND	5
GA	111	IA	28	AK	5
HI	107	KY	27	VI	4
OH	106	OK	26	MS	3
DC	102	WV	24		
WA	97	LA	22		

Canada	153	Spain	19	Poland	5	Bahrain	2	Estonia	1
Germany	81	Switzerland	19	Austria	4	Colombia	2	Latvia	1
United Kingdom	80	Mexico	18	Czech Republic	4	Georgia	2	Luxembourg	1
Japan	69	Taiwan	15	Denmark	4	Hong Kong	2	New Zealand	1
Republic of Korea	57	Sweden	12	Finland	4	Iceland	2	Philippines	1
Australia	44	Israel	11	Greece	4	Lebanon	2	Portugal	1
China	34	South Africa	9	Ireland	4	Singapore	2	Romania	1
France	34	Brazil	8	Holy See (Vatican City)	3	Argentina	1	Serbia	1
Netherlands	33	Norway	8	Russian Federation	3	Costa Rica	1	Sri Lanka	1
Chile	29	Belgium	7	Turkey	3	Cyprus	1	Uruguay	1
Italy	26	India	5	United Arab Emirates	3	Egypt	1	Venezuela	1



After two open searches in 2017, Ethan Vishniac and Frederic Rasio were reappointed as AAS Editor in Chief and *Astrophysical Journal Letters* Editor, respectively. In October 2017, *Research Notes of the AAS* was launched, a non-peer reviewed, indexed and secure record of works in progress, comments and clarifications, null results, or timely reports of observations in astronomy and astrophysics.

In 2017, submissions to *The Astronomical Journal*, *The Astrophysical Journal*, *The Astrophysical Journal Supplements*, and *Research Notes of the AAS* were organized into seven new topic corridors, as directed by the AAS Journals Futures Task Force:

- Cosmology and Galaxies (Lead Editor: Ethan Vishniac)
- Stars and Stellar Physics (Lead Editor: Steve Kawaler)
- Interstellar Matter and the Local Universe (Lead Editor: Judith Pipher)
- The Solar System, Exoplanets, and Astrobiology (Lead Editor: Melissa McGrath)
- High Energy Phenomena and Fundamental Physics (Lead Editor: Frank Timmes)
- The Sun and the Heliosphere (Lead Editor: Leon Golub)
- Instrumentation, Software, Laboratory Astrophysics, and Data (Lead Editor: Chris Lintott)

The *Astrophysical Journal Letters* was incorporated into the main AAS Journals submission site at the end of 2017, and the editorial office at Northwestern University was closed. The complete list of 2017 science editors is below:

Lee Armus (Caltech)	Dieter Hartmann (Clemson Univ)	Thomas Robitaille (Aperion)
Butler Burton (Univ of Leiden)	Louis Ho (Peking Univ)	Ata Sarajedini (Florida Atlantic Univ)
Giovanni Carraro (Univ of Padova)	George Jacoby (Lowell Observatory)	Daniel Savin (Columbia Univ)
Chris Conselice (Univ of Nottingham)	Bhuvnesh Jain (Univ of Pennsylvania)	Daniel Scheers (Univ of Colorado)
Bozena Czerny (Copernicus Center)	Rekha S Jain (Univ of Sheffield)	Allen Shafter (San Diego State Univ)
Michael Endl (Univ of Texas Austin)	Steven D. Kawaler (Iowa State Univ)	Steinn Sigurdsson (Pennsylvania State Univ)
Eric D. Feigelson (Penn State)	Chris Lintott (Univ of Oxford)	Luigi Stella (INAF Univ of Rome)
Brad Gibson (Univ of Hull)	Melissa McGrath (SETI)	Francis Xavier Timmes (Arizona State Univ)
Leon Golub (Harvard CfA)	Judith L. Pipher (Univ of Rochester)	Fabian Walter (MPIA Heidelberg)
Richard de Grijs (Peking Univ)	Aimee Norton (Stanford Univ)	Gary Zank (U Alabama)
Shadia Habbal (Univ of Hawaii)	Fred Rasio (Northwestern Univ)	

The AAS Publishing team included six staff members in 2017: Alexandra Aguilar, Editorial Assistant (Arizona); Susanna Kohler, AAS Nova Editor (California); August (Gus) Muench, Journals Data Scientist (Massachusetts); Greg Schwarz, Journals Data Scientist (Pennsylvania); Janice Sexton, AAS Editorial Operations Manager (Arizona); and Julie Steffen, Director (Arizona).

The *Astronomical Journal* published 554 research articles in 2017; *The Astrophysical Journal* published 3,085; *The Astrophysical Journal Letters* published 554, and *The Astrophysical Journal Supplement Series* published 176, for a grand total of 4,369 research papers in 2017. There were 56 *Research Notes of the AAS* published in 2017.

AAS & DIVISION MEETINGS

The stars at night, are big and bright, deep in the heart of Texas, and that's where the American Astronomical Society held both its semiannual meetings in 2017. The 229th AAS meeting convened at the Gaylord Texan Resort & Convention Center overlooking beautiful Grapevine Lake near Dallas-Fort Worth airport. To avoid clashing with the New Year's Day holiday, which fell at an awkward time in the week, the January 2017 gathering took place Tuesday-Saturday, 3-7 January, rather than the usual Sunday-Thursday. Gathering with the AAS this time were the Historical Astronomy Division (HAD) and High Energy Astrophysics Division (HEAD), the two Divisions that usually meet with the parent Society in January. HAD hosted special sessions celebrating its 2017 Osterbrock Book Prize for *The Biographical Encyclopedia of Astronomers* edited by Tom Hockey (Univ. of Northern Iowa) and "Some Notes on the History of Infrared Astronomy from Above the Atmosphere." HEAD convened two special sessions as well: "Astronomy Across the Gravitational Wave Spectrum" and "The Physics of the Perseus Cluster, and Other Highlights, from Hitomi," Japan's short-lived X-ray-astronomy satellite.

The Grapevine meeting, which attracted more than 2,500 attendees, offered a rich assortment of prize and invited talks by distinguished astronomers, beginning with the Kavli Foundation Lecture by William Bottke (Southwest Research Institute), "Early Solar System Bombardment: Exploring the Echoes of Planetary Migration and Lost Ice Giants." Laura Lopez (Ohio State Univ.), recipient of the Annie Jump Cannon Award, presented her prize lecture on the tumultuous lives and deaths of stars. Christopher McKee (Univ. of California, Berkeley), who was honored for lifetime achievement, gave the Henry Norris Russell Lecture, "How Stars Form."

Martin Aubé (Cégep de Sherbrook) presented "The LED Outdoor Lighting Revolution: Opportunities, Threats, and Mitigation." If Big Bang cosmology leaves you scratching your head, Sean Carroll (Caltech) let you know you're in good company when he gave his talk "What We Don't Know About the Beginning of the Universe." Wendy Freedman (Univ. of Chicago) continued on that theme with her Dannie Heineman Prize lecture "Increasing Accuracy and Increasing Tension in the Hubble Constant," after which W. Neil Brandt (Pennsylvania State Univ.) gave his HEAD Bruno Rossi Prize lecture, "A Good Hard Look at Growing Supermassive Black Holes in the Distant Universe."

The Sun was the star when Terry Forbes (Univ. of New Hampshire) described his work on magnetic energy release in solar flares, for which he was awarded the AAS Solar Physics Division George Ellery Hale Prize. Karen Öberg (Harvard-

Smithsonian Center for Astrophysics) presented her Newton Lacy Pierce Prize lecture, "The Chemistry of Planet Formation," and Philip Hopkins (Caltech) gave his Helen B. Warner Prize talk, "Feedback: Now with Physics." Laura Fissel (Northwestern Univ.) floated plenty of new ideas in her talk "Astronomy from the Upper Stratosphere: Key Discoveries and New Opportunities from High Altitude Scientific Balloons."

The final day's plenary lectures began with "Exploring for Galaxies in the First Billion Years with Hubble and Spitzer — Pathfinding for the James Webb Space Telescope" by Garth Illingworth (Univ. of California, Santa Cruz), recipient of the Lancelot M. Berkeley Prize. Alien hunter Jill Tarter (SETI Institute) presented "The 21st Century: The Century of Biology on Earth and Beyond," and Alex Young (NASA Goddard Space Flight Center) discussed NASA's plans for the American astronomical highlight of 2017: the August 21st coast-to-coast total solar eclipse. Megan Donahue (Michigan State Univ.) gave the final scientific talk of the meeting, "How Supermassive Black Hole Feedback Might Work." Proving that last doesn't mean least, she was subsequently voted President-Elect of the AAS.

In addition to the plenaries and the contributed oral and poster presentations, the Grapevine program offered numerous Town Hall meetings on astronomy and public policy, including a session on Astro2020, the next decadal survey of astronomy and astrophysics, as well as a special plenary Town Hall to discuss racism in astronomy.

Our "Texas two step" continued with the 230th AAS meeting, which attracted more than 600 attendees to Austin, the Lone Star State's capital. The AAS Laboratory Astrophysics Division (LAD) held its annual meeting in conjunction with the conference, featuring numerous oral and poster sessions on the theme "Bridging Laboratory and Astrophysics," with topics ranging from ices in the solar system to plasmas in active galactic nuclei. Bonnie Buratti (Jet Propulsion Laboratory) gave a LAD plenary talk on results from the European Space Agency's Rosetta mission to Comet 67P/Churyumov-Gerasimenko. The recipients of LAD's 2017 Laboratory Astrophysics Prize, Early Career Award, and Dissertation Prize each gave lectures in Austin too: James Lawler (Univ. of Wisconsin, Madison), Carolyn Kuranz (Univ. of Michigan), and Kyle Walker (Université du Havre, France), respectively.

A unique feature of AAS summer meetings is the degree to which members help shape the program by organizing one-off Special Sessions and multisession Meeting-in-a-Meeting (MiM) sessions. In Austin a special session entitled "Topics



in Astrostatistics” explored the intersection of observational astronomy, statistics, and data science through invited lectures by topical experts and contributed posters by other practitioners. A six-session MiM introduced the projects to be tackled by teams with guaranteed observing time on the James Webb Space Telescope when it eventually reaches orbit. And Rebekah Dawson (Pennsylvania State Univ.), recipient of the 2017 Annie Jump Cannon Award for her work on exoplanets, organized a MiM, “Inner Solar Systems,” on hot Jupiters and other exoplanets orbiting inexplicably close to their host stars.

Among the other distinguished scientists who presented invited or prize lectures in Austin were Katherine Freese (Univ. of Michigan and Stockholm Univ.), who kicked off the meeting with the Kavli Foundation Lecture on where we stand in our quest to understand and identify dark matter; Manfred Schüssler (Max Planck Institute for Solar System Research) had his day in the Sun as recipient of SPD’s George Ellery Hale Prize for his work on the solar dynamo; and Hernán Quintana (Pontificia Universidad Católica de Chile) gave a special AAS Education Prize lecture on challenges and opportunities in astronomy education.

Delores Knipp (Univ. of Colorado, Boulder) scared the heck out of us by talking about space weather and the coupling between the solar wind and Earth’s magnetosphere. David Koo (Univ. of California, Santa Cruz) related what we’ve learned about galaxy evolution by studying the most distant galaxies. Caitlin Casey (Univ. of Texas, Austin) focused instead on the strange beasts known as submillimeter galaxies, which aren’t extremely tiny galaxies, as their name implies, but star systems that emit strongly at short radio wavelengths. Toward the other end of the spectrum, X-rays from the center of our own galaxy were the subject of a plenary talk by Daniel Wang (Univ. of Massachusetts, Amherst).

High flyers appreciated hearing from Erick Young (Universities Space Research Association) about key science highlights from the Stratospheric Observatory for Infrared Astronomy

and from Chris Impey (Univ. of Arizona) about our future in space. As we celebrated the 30th anniversary of Supernova 1987A, Doug Leonard (San Diego State Univ.) discussed the identification of supernova precursors. And if you grew up in a solar system with nine planets, you did not want to miss hearing the latest on the search for “Planet Nine” from Konstantin Batygin (Caltech). Spoiler: It hasn’t been found yet.

As it does every four years, the AAS winter meeting — the “Super Bowl of Astronomy” — returned to the nation’s capital, or at least the general vicinity, in January 2018. The 231st AAS meeting convened at the Gaylord National Resort & Convention Center in National Harbor, Maryland. The quadrennial DC meeting is always the Society’s largest, and this one attracted more than 3,000 scientists, educators, journalists, and others from all over the world.

Science sessions got under way with the Kavli Foundation lecture by Scott Bolton (Southwest Research Institute) on findings from the Juno mission to Jupiter. He was followed by a stellar lineup of 16 plenary talks by AAS prize winners and other distinguished astronomers, including Nobel Prize-winner Adam Riess (Johns Hopkins Univ.), who provided a status report on the quest to pin down the Hubble constant and understand the nature of dark energy.

The Henry Norris Russell Lecture, recognizing a lifetime of preeminence in astronomical research, was presented by Eric Becklin (Univ. of California, Los Angeles), who played a leading role over the last half century in turning infrared astronomy into a fundamental tool for understanding the universe. The recipient of the HAD Leroy Doggett Prize, Sara Schechner (Harvard Univ.), described heroic efforts to preserve historical astronomical instruments, and the recipient of the HEAD Bruno Rossi Prize, Gabriela González (Louisiana State Univ.) on behalf of the LIGO Scientific Collaboration, celebrated the birth of multimessenger astrophysics involving observations of gravitational waves and electromagnetic radiation from exotic sources. This emerging discipline is so important and

dynamic that it was the subject of two additional invited presentations, including one by Mansi Kasliwal (Caltech) as well as the meeting's final plenary, the Berkeley Prize lecture by Peter Fritschel (MIT) on behalf of himself and co-recipients Dennis Coyne (Caltech) and David Shoemaker (MIT).

HAD convened two special sessions: "The Future of Astronomy's Archived Observations — An Open Discussion" and "From the Earliest Astronomy to Space Missions: Explorations in the History of Astronomy." HEAD did the same, with "First Results from the Neutron star Interior Composition Explorer (NICER)" and "GW170817/GRB170817A: Multimessenger Astrophysics from a Neutron Star Merger." LAD held one special session entitled "Water, Water Everywhere," exploring studies of this life-sustaining

molecule in the solar system and interstellar space. More than two dozen additional special sessions occurred throughout the week, focusing not only on hot scientific topics (including findings from the 21 August 2017 "Great American Eclipse") but also on such diverse issues as astronomy education, light pollution, the coming decadal survey for the 2020s, and the status of the astronomy workforce.

The meeting also featured a variety of public-policy Town Hall sessions where attendees had the opportunity to interact with representatives from NASA, the National Science Foundation, the National Radio Astronomy Observatory, the National Optical Astronomy Observatory, and several other funding agencies and astronomical facilities.

PUBLIC POLICY

The AAS conducts a wide range of public policy activities on behalf of the membership and US astronomy. The Committee on Astronomy and Public Policy (CAPP), whose members are appointed by the President of the AAS, is charged with guiding the Society's policy activities in close collaboration with the policy staff in the Executive Office.

Together, CAPP, the Director of Public Policy, and the John Bahcall Public Policy Fellow (JBPPF) closely monitor science and space policy developments important to the astronomical community and engage with policymakers at federal agencies, in the administration, and in Congress through advocacy initiatives.

CAPP and the Executive Office policy staff communicate most directly to the membership through three primary avenues:

- **Plenary and concurrent policy sessions at the AAS and Division meetings.** While there was not space for a policy plenary at the 2017 AAS winter meeting in Grapevine, CAPP and the AAS policy staff organized a special session on the US presidential transition, with participation by a panel of science and space policy experts.
- **AAS Policy Blog and Twitter feed.** The AAS Policy Blog, authored by the JBPPF, communicates important developments in astronomical science policy to the membership, and is distributed as part of the biweekly

AAS News Digest e-mail in addition to appearing on the AAS website. The JBPPF (and some guest member writers) published 30 posts on the AAS Policy Blog in 2017. Additionally, the JBPPF operates the @AAS_Policy twitter account, tweeting updates, announcements, news, and analysis of astronomical science policy developments. The account's audience includes not only AAS members, but also members of the general public, science/higher education federal relations community, and Congressional and agency staff.

- **Invited talks at academic and research institutions:** The AAS shares travel costs when sending the Director of Public Policy or the JBPPF to institutions. In 2017, the JBPPF gave three invited talks about science policy and AAS advocacy.

AAS members can have a significant impact on federal science policy by visiting Congress. The AAS facilitates such visits with training, materials, and guidance. In 2017, the AAS provided three opportunities for Society members to learn how federal policymaking for science works and to lobby their elected Representatives and Senators in Washington, DC. **AAS leads a Congressional Visits Day (CVD) every March;** in 2017, 16 AAS members participated in CVD, visiting 43 offices representing 15 states. AAS also brings members to the Science, Engineering, and Technology Working Group (SETWG) — a working group that consists of members from various scientific and technical professional societies as well as universities and industry —



visit day in May. AAS and Division leadership regularly visit Capitol Hill, also, and the AAS policy office supported visits by the DPS Committee and the SPD Public Policy Committee.

AAS works to engage a large number of members for collective impact on policy via Action Alerts. Action Alerts go out via e-mail to all AAS members, or occasionally AAS members who live in the districts of relevant policymakers, and identify key issues in federal astronomical sciences policy. Each Action Alert has a specific topic or “ask,” and members are given information on how to contact their Senators and/or Representatives and guidelines on what to say. In 2017, the AAS issued five Action Alerts, ranging on topics from NSF and DOE funding, to ending the sequester, to proposed taxes on graduate student tuition.

In 2017, AAS continued to cosponsor, with the Smithsonian Astrophysical Observatory, a Congressional briefing series, “Space on the Hill.” The briefings are hosted by the chair of the House Science, Space, and Technology Committee and are an opportunity to educate Congressional staff about the astronomical sciences. In 2017, we held two briefings: “Shedding Light on Black Holes,” about how and why astronomers study black holes and, “Is There Life on Other Planets?” about astronomers’ role in the search for life beyond our own planet.

Many stakeholders share interest in various elements of federally-supported science, and working together can help amplify our messages and increase impact. The AAS is a member of several coalitions in Washington, DC that work on science, space, and science-education policy and

are typically comprised of professional societies, colleges and universities, and industry partners. In 2017, the AAS remained an active member of the Coalition for National Science Funding, the Task Force on American Innovation, the Energy Sciences Coalition, the Coalition for Aerospace and Science, the Science, Engineering, and Technology Working Group, the Physical Sciences Education Policy Coalition, and GATF, a coalition of scholarly publishers. The AAS is also an affiliate member of the STEM Education Coalition, and participates in ad hoc coalitions or joint efforts of scientific societies led by organizations like the American Association for the Advancement of Science or the National Academies of Sciences. Coalitions build stakeholder consensus on issues of shared concern, and jointly determine effective advocacy strategies. In 2017, the AAS was a signatory on 14 letters to Congress or the administration via these coalitions.

As part of our participation in the Coalition for National Science Funding, AAS joined an exhibition on Capitol Hill to highlight projects funded by the National Science Foundation (NSF). AAS brought a solar astronomer to the exhibition to discuss the National Solar Observatory (NSO). The exhibit focused on the importance of understanding the physical processes that lead to phenomena like space weather events and included information about the Daniel K. Inouye Solar Telescope and the Global Oscillation Network Group. AAS and NSO also took the opportunity to provide information about the total solar eclipse on 21 August 2017. Attendees to the AAS/NSO table included NSF employees (including NSF Director Dr. France Córdoba), congressional staffers, and members of the general public.

DIVISIONS, COMMITTEES, WORKING GROUPS & TASK FORCES

The AAS is a diverse group of members passionate about their discipline. What the AAS can accomplish is greatly enhanced by our Divisions, Committees, Working Groups, and Task Forces. Each has a role to play, and all are enabled by the dedicated enthusiasm of volunteer leaders and participants.

AAS DIVISIONS

The AAS Divisions cover major areas of astronomical endeavor. Our six topical Divisions are the Division on Dynamical Astronomy, Division for Planetary Sciences, Historical Astronomy Division, High Energy Astrophysics Division, Laboratory Astrophysics Division, and Solar Physics Division. Each has its own governing committee, whose volunteer leaders guide the strategic direction of the Division and enhance our field via service on the AAS Strategic Assembly. All AAS members may join any, and as many, Divisions as they choose; each Division has its own membership dues and bylaws. Several Divisions have affiliate memberships, which allow scientists who would not otherwise be, or do not qualify to be, full members of the AAS to participate in Society and Division activities.

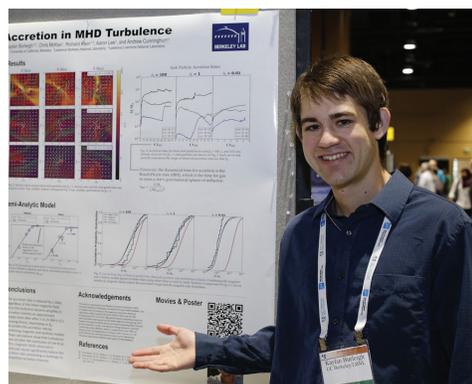
AAS COMMITTEES

The AAS Committees help implement many of the strategic goals of the Board of Trustees, and key Committee chairs serve on the Strategic Assembly as well. A full list of Committees is available on the AAS website, but some of the most important include our diversity committees — Committee on the Status of Women in Astronomy, Committee on the

Status of Minorities in Astronomy, and Committee for Sexual-Orientation & Gender Minorities in Astronomy — as well as the Committee on Public Policy, the Publications Committee, and the Employment Committee. Some committees require election, while most rely simply on interested individuals to volunteer for service. Each AAS prize and award has its own selection committee, and there are a range of administrative committees that look after the operation of the Society in a variety of ways. Individuals interested in volunteering for committee service should contact the AAS Secretary.

WORKING GROUPS & TASK FORCES

Working Groups and shorter-term Task Forces are formed by the Board of Trustees to look after specific issues in our field. These currently include the Working Group on Astroinformatics and Astrostatistics, Working Group on Time Domain Astronomy, Working Group on Accessibility and Disability, and Working Group on the Preservation of Astronomical Heritage. Sometimes Working Groups stay active for a long time, like the Working Group on Astronomical Software, while occasionally they “graduate” to a full-fledged Division, as outlined in our bylaws. Understandably active in 2017 was the Solar Eclipse Task Force, which coordinated activities associated with August’s “Great American” solar eclipse and promoted sensible eye-safety messaging. That group’s work is largely finished, but the Task Force on Diversity and Inclusion in Graduate Astronomy Education remains hard at work.



Through its education and outreach programs, the AAS nourishes a scientific outlook in society to help increase public support for scientific research, improve science education at all levels, attract young people to careers in science and technology, and make evident the connections between science, technology, and prosperity. The highest priorities of the AAS in these areas are to promote and support training the next generation of astronomers to become successful scientific researchers and educators, and to encourage and support high-quality research on the teaching and learning of astronomy.

Except as noted below, AAS education programs are administered by the AAS Executive Office, primarily by Gina Brissenden, Education & Outreach Coordinator (+1 202-328-2010 x122, gina.brissenden@aaas.org). General questions should be addressed to education@aaas.org. See aaas.org/education for more information about the items listed below as well as other AAS education programs.

The Education Committee: The Education Committee, led by a Board of Trustees-Appointed Chair, is charged with oversight of the education activities of the AAS by providing advice to the Board of Trustees, the Executive Officer, and the Education & Outreach Coordinator.

The AAS Education & Professional Development Mini-Grant Program: In January of 2017, the AAS Board of Trustees (then, Council) approved the recommendation from the AAS Education Task Force to create a grants program for US-based AAS members to provide education-related mentoring and professional-development experiences for fellow members. Six proposals were funded in Cycle 1.0, 2017.

Education Sessions at AAS Meetings: Oral and poster sessions on various aspects of astronomy education are regular features of AAS meetings. Special sessions and workshops are often organized by AAS members involved in astronomy-related education research, curriculum/professional development, and outreach.

The AAS Harlow Shapley Visiting Lectureship Series: Launched in 1958, the AAS coordinates a program of two-day visits to colleges and universities by professional astronomers who wish to share the excitement of modern astrophysics with students, faculty, and the public. The AAS makes concerted efforts to reach out to minority serving institutions and community colleges. In 2017, efforts continued to increase the diversity (across people, topics, and locations/types of institutions of speakers) within the pool of Shapley Visiting Lecturers.

The AAS Astronomy Ambassadors Program: Launched in January 2013, at the 221st Meeting of the AAS in Long Beach, CA, the AAS Astronomy Ambassadors program comprises a professional development workshop and a community of practice designed to help improve early-career astronomers' ability to communicate effectively with students and the public. In 2017, at the 229th Meeting of the AAS in Grapevine, TX, 25 new AAS Astronomy Ambassadors received training to enter these ranks.

The AAS Student Education Outreach Program: Launched in June 2012 at the 220th meeting of the AAS in Anchorage, Alaska, the AAS Student Education Outreach Program invites students and their chaperones (teachers and/or parents) to drop in at AAS meetings, on a prearranged morning, to hear a special presentation from an astronomer and to then tour the Exhibit Hall, where numerous exhibitors conduct age-appropriate interactive demonstrations and other educational activities. This program has proven to be very popular, typically including 150-250 local middle-school through community college students from underserved minority populations, STEM programs, and homeschool groups. Through a generous contribution from long-standing sponsor Associated Universities, Inc., the AAS is able to supply transportation and additional resources to provide this program free of charge. In June 2017, at the 229th (Grapevine, TX) and 230th (Austin, TX) meetings of the AAS, approximately 300 students and their parents came from surrounding schools, with 50% of students from coming from homeschool programs.

Other education programs within the AAS include coordinating the Rodger Doxsey Travel Prize, which provides graduate students or postdocs within one year of receiving or receipt of their PhD with a monetary prize to enable the oral presentation of their dissertation research at a winter AAS meeting. The AAS also coordinates the Chambliss Student Astronomy Achievement Awards, which recognize exemplary research by undergraduate and graduate students who present posters at AAS meetings.

Finally, the Education and Outreach Coordinator also serves as the AAS liaison to other scientific societies' education programs. As a result of such collaboration with the American Institute of Physics (AIP), participation by the Society of Physics Students (SPS) is now a regular feature of winter AAS meetings; SPS exhibits at the undergraduate reception and holds a special evening poster session at which a well-known astronomer gives a career-oriented "pep talk" to the attending students.

MEDIA RELATIONS

The role of the AAS Press Office is to ensure media attention to newsworthy scientific results that are presented at Society meetings, presented by AAS members or other astronomy researchers at scientific conferences worldwide, published in peer-reviewed journals (including our own *Astrophysical Journal* and *Astronomical Journal*), or announced in press releases from recognized astronomy-related institutions. An ancillary role is to ensure media recognition for recipients of major astronomical prizes and honors, especially those awarded by the Society or its Divisions. These responsibilities fall to the AAS Press Officer, Dr. Richard Tresch Fienberg, who organizes press conferences at AAS meetings, handles media inquiries and requests for expert referrals, and manages the AAS press-release-distribution service, which forwards astronomy-related releases from public-information officers to journalists all over the world and working in all forms of print, broadcast, and electronic media. He also distributes headlines and links to online press releases via the Twitter account [@AAS_Press](#) and manages the Astronomy in the News section of the AAS website.

Rick is a member of the AAS Executive Office staff, though he works from home near Cambridge, Massachusetts, where he earlier spent 22 years at *Sky & Telescope* magazine, including eight as Editor in Chief. Assisting as volunteers through the January 2017 AAS meeting were longtime Deputy Press Officers Dr. Larry Marschall (retired from Gettysburg College) and

Dr. Inge Heyer (Loyola University Maryland). Since then Rick has been assisted by AAS Media Fellow Kerrin Grace Hensley, a graduate student at Boston University who is working part time for the Society for two years, shared between Rick and the Editor of AAS Nova (see below).

In preparation for AAS meetings, the Press Officer solicits press, photo, and video releases; arranges press conferences, photo opportunities, press tours, and seminars for science writers; and prepares media advisories and a press kit. During meetings, press conferences are webcast live for journalists unable to attend in person. Working with the American Association for the Advancement of Science's EurekaAlert service, complimentary access to the electronic editions of the *Astrophysical Journal* and the *Astronomical Journal* is provided to accredited reporters who are not employed as astronomers.

Another of the Press Officer's responsibilities is to arrange for photography at AAS meetings. Since 2016 we have been using the services of Corporate Event Images, run by Todd Buchanan and usually assisted by Phil McCarten. Todd and Phil have enhanced the quality of our meeting photography considerably and have sped up the process of posting the photos online. Furthermore, they can shoot videos as well as still photos; we occasionally ask them to make a short video to recap the last meeting and promote the next one.



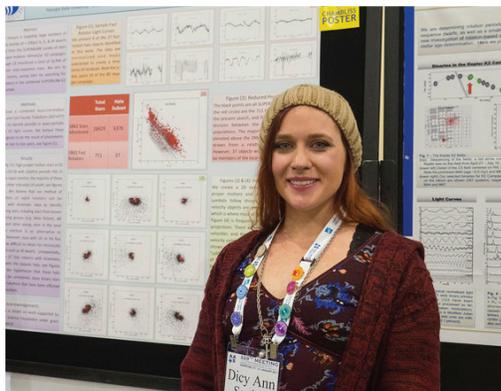
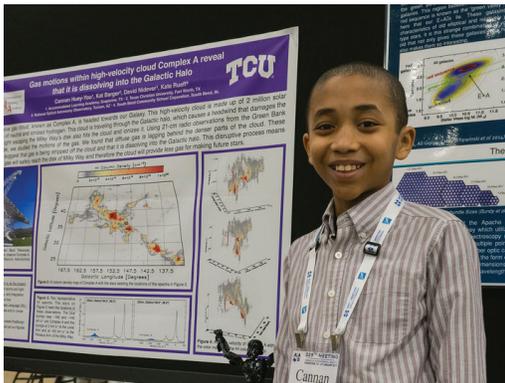
We've been forwarding press releases to the news media by email for more than four decades. The AAS press list is actually two lists: one for reporters eligible to receive embargoed releases, and one for public-information officers (PIOs) who, according to rules established by Science and Nature, are ineligible to receive embargoed releases. Releases go to more than 2,500 email addresses, with about 2,100 of them on the press list and about 400 on the PIO list. On average, we forward about 100 ± 25 press releases each month. We receive dozens more, but we don't forward releases if we don't think they'll be of interest to our list members (as is the case, for example, with NASA releases about contract extensions and university releases about small grants to individual investigators). The [@AAS_Press](#) Twitter account has nearly 4,800 followers. Not all of them are journalists or PIOs; many are astronomers (including AAS members) or astronomy enthusiasts among the general public.

The AAS Press Office has been working more closely with AAS Publishing since 2015 in connection with AAS Nova. Launched that August in collaboration with our journal-publishing partner, IOP Publishing, the AAS Nova website provides a curation service to the astronomical community, highlighting breakthroughs and discoveries that busy researchers might otherwise overlook, especially outside their immediate area of expertise. The site's editor, Dr. Susanna Kohler, writes a biweekly "tip sheet" alerting journalists to potentially newsworthy papers featured on AAS Nova; it is distributed via the AAS press list, and links to new articles on AAS Nova are

posted daily to the Astronomy in the News section of the AAS home page.

In 2017 the AAS continued to develop its partnership with Astrobites, a blog operated by graduate students to share news about interesting astro-ph preprints with a wider audience. Between one and six Astrobites authors are granted press registration at each AAS meeting to spend time in the press office learning about media relations and to cover the meeting for the blog, vastly increasing the amount of coverage we get. In addition, we cross-post content between Astrobites and AAS Nova, which leads to at least one Astrobites item appearing on the AAS home page each week throughout the year.

The 229th AAS meeting in Grapevine, Texas, in January 2017 attracted 79 press registrants. Another 41 reporters requested the press-conference-webcast password. On-site press registrants were a mix of approximately two-thirds reporters and one-third PIOs, as usual. The AAS Press Officer organized seven press conferences and one seminar for science writers (on the August 2017 "Great American" solar eclipse) at the winter meeting. We had 22 on-site press registrants at the 230th AAS meeting in Austin, Texas, in June 2017, plus 33 requests for the website password to enable remote participation in our five press conferences. As changes to the media landscape make it harder for journalists to attend our meetings in person, the relative importance of our press-conference webcasts increases, as the June 2017 meeting made plain.



The annual audit for 2017 was completed by SnyderCohn. As with past years, the audit report received an unqualified opinion. In 2017, there was an overall decrease in net assets of \$256,576 dollars; resulting in a total assets of \$15,681,290 as of 31 December 2017.

The unrestricted net assets, which are comprised of operating reserves, were \$12,759,773 as of 31 December 2017. This amount decreased overall by \$574,981 in 2017 as opposed to the loss of \$1,164,877 in 2016. This loss was offset by investment portfolio value increases for the Journal operating reserves and the GORF in the amount of \$1,370,681. Excluding the portfolio value, the loss was actually \$1,945,662 as opposed to \$2,154,641 in 2016. This decrease is directly attributed to the 2017 budgeted deficits, planned use of the General Fund beginning balance, and unanticipated expenses such as the high costs of legal and contractual costs associated with enforcement of our harassment and ethics policies.

The largest loss occurred in the journals program which experienced a deficit of \$1,096,551 in 2017. The journal development expenses reached \$570,423, we also expensed \$51,202 in hotel attrition, and the general fund produced a deficit of \$141,505. Additionally, we incurred \$114,089 in legal and consulting fees associated with the harassment and ethics issues in 2017. These deficits resulted in a \$2,400,000 draw from the investment portfolio in 2017.

The 2017 initiatives for the AAS journals produced good results that we anticipate will increase revenue over time. In 2017, we collected \$175,509 in Gold Open Access (GOA) fees. Additionally, our partnership with IOP and inclusion into the larger subscription bundle (IOPsx) netted an additional \$38,293 in royalty revenue. In 2017, 41% of our *AJ* institutional subscribers purchased our content through the IOPsx package as opposed to 39% of our *ApJ* institutional subscribers.

AAS bylaws, Article VIII.3, mandate that each Journal maintains a reserve fund equal or above the level of one-half of the annual operating expenses. In addition to the journal reserve funds, we have a segregated journal archive reserve fund to ensure the long-term maintenance of the electronic journals. As of 31 December 31, 2017, the journal reserve fund balances reached \$7,860,752, representing 102.6% of the 2017 expenses.

In 2017, the AAS financially supported members through many different programs to facilitate attendance at our scientific meetings.

- Through the AAS FAMOUS Travel Grants Program, we provided travel grants totaling \$20,007 to 27 individuals. FAMOUS stands for Funds for Astronomical Meetings:

Outreach to Underrepresented Scientists, so priority is given to members of historically underrepresented groups, such as scientists at small colleges, minorities, non-traditional students, and veterans, among others.

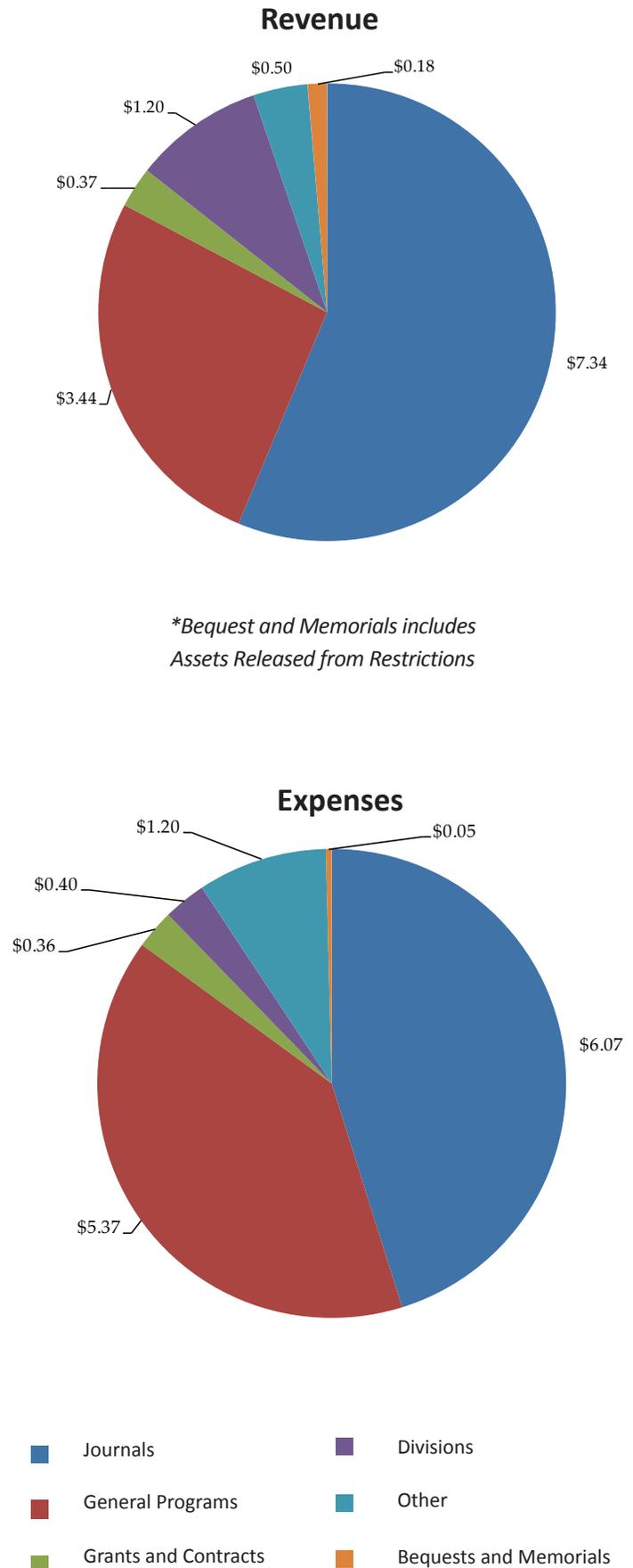
- In 2016, the AAS awarded 19 childcare/dependent care grants in the amount of \$4,509. Additionally, we subsidized the on-site childcare program in the amount of \$6,799.
- A research grant in the amount of \$15,000 was awarded through the Chretien Grant Program.
- Twenty-nine student travel grants were awarded in the amount of \$18,239 to attend AAS and Division meetings in 2017.
- The AAS and Divisions issued 29 Prize Awards in the amount of \$39,550 in 2017.
- Through an NSF grant, we funded 35 individuals under the International Travel Grant in the amount of \$82,538.

Figure 1. AAS Balance Sheet

Assets	2017	2016
Cash and Cash Equivalents	561,316	332,788
Accounts Receivable	521,545	549,601
Prepaid Expenses	702,458	622,233
Investments	18,537,626	18,704,350
Deposits	92,386	97,849
Assets Held for Deferred Compensation	153,923	110,480
Property and Equipment	350,147	418,351
Tenant Improvement Assets	496,188	539,336
Totals Assets	\$21,415,589	\$21,374,988
Liabilities and Net Assets		
Accounts Payable and Accrued Expenses	1,627,928	1,437,236
Deferred Revenue	3,279,985	3,307,876
Deferred Rent	672,463	653,418
Deferred Compensation	153,923	110,480
Total Liabilities	\$5,734,299	\$5,509,010
Net Assets		
Unrestricted	12,759,773	13,334,754
Temporarily Restricted	2,355,179	2,037,124
Permanently Restricted	566,338	565,988
Total Net Assets	\$15,681,290	\$15,937,866
Total Liabilities and Net Assets	\$21,415,589	\$21,446,876

Figure 2. AAS Statement of Activities		
Unrestricted Activities	2017	2016
Revenues		
Journals	7,329,843	6,698,728
General Programs	3,442,215	3,486,655
Grants and Contracts	362,773	175,686
Divisions	1,189,512	1,333,714
Other	498,363	337,524
Bequests and Memorials	79,487	52,349
AstronomyCom, Inc.	51,697	29,985
Net Assets Released from Restrictions	98,737	90,314
Total Unrestricted Income	\$13,052,627	\$12,204,955
Expenses		
Journals	6,072,458	6,439,668
General Programs	5,367,962	5,063,329
Grants and Contracts	364,744	173,929
Divisions	395,267	366,853
Other	1,200,486	1,108,899
Bequests and Memorials	54,033	50,965
AstronomyCom, Inc.	172,658	166,189
Total Expenses	\$13,627,608	\$13,369,832
Change in Unrestricted Net Assets	(\$574,981)	(\$1,164,877)
Temporary Restricted Net Assets		
Divisions	87,926	52,334
Bequests and Memorials	171,808	98,690
Contributions and Other	157,058	116,581
Net Assets Released from Restrictions	(98,737)	(90,314)
Change in Temporarily Restricted Net Assets	\$318,055	\$177,291
Permanently Restricted Net Assets		
Contributions and Other	350	600
Change in Permanently Restricted Net Assets	\$350	\$600
Change in Net Assets	(\$256,576)	(\$986,986)
Net Assets Beginning of Year	15,937,866	16,924,852
Net Assets End of Year	\$15,681,290	\$15,937,866

Figure 3. Annual Revenues and Expenses (in millions of dollars)





Rebekah Dawson
Annie Jump Cannon Award
For her work modeling the dynamical interactions of exoplanets in multiplanet systems.



Lars Bildsten
Dannie Heineman Prize
For his observationally grounded theoretical modeling of stars, which has yielded fundamental insights into the physics of stellar structure and evolution, compact objects, and stellar explosions.



Hernán Quintana
Education Prize
For his tireless work over more than three decades developing and bringing astronomy education and degree programs into Chilean universities.



Charlie Conroy
Helen B. Warner Prize
For his work in modeling stellar populations and galaxy evolution.



Eric Becklin
Henry Norris Russell Lectureship
For his leadership role over the last half century in turning infrared astronomy into a fundamental tool for understanding the universe.



Evan Kirby
Newton Lacy Pierce Prize
For his work on the chemical abundances of stars in dwarf galaxies. He has done pioneering work in isolating metallicity variations in late-type stars through medium-resolution spectroscopy and in identifying different stellar populations within faint and distant dwarf galaxies.



Ian S. McLean
Joseph Weber Award
For more than 30 years at the forefront of the development of advanced infrared sensor arrays and for his leadership in the design, construction, and deployment of innovative infrared instruments that have had widespread and fundamental scientific impact across a broad community of astronomers.

DONOR RECOGNITION

QUASAR: \$1,000-\$4,999

Anonymous (1) Marsha Allen Edward K. Conklin Reginald J. Dufour	Sandra M. Faber Patricia Gruber William K. Hartmann Arnold M. Heiser	Tomislav Kundic Eunice & Arlo U. Landolt Jeremiah Ostriker Lawrence W. Ramsey	Henry G. Roe Daniel Wolf Savin Bruce A. Twarog Jacqueline Van Gorkom	William C. Wells
--	---	--	---	------------------

SUPERNOVA: \$500-\$999

Edward Anders Eric E. Becklin Nancy S. Brickhouse Nancy J. Chanover Brad Conrad Donald R. Davis David H. DeVorkin - In Honor of Vera Rubin	William Van Dyke Dixon R. Paul Drake Jules P. Halpern Richard J. Harms David J. Helfand Philip E. Hodge Esther M. Hu Laura E. Kay Marvin M. Litvak	Stephen P. Maran Nancy D. Morrison Curt Niebur, PhD Terry D. Oswalt John Peoples Joseph E. Pesce Guy B. Purcell Donald J. Rudy Farid Salama	Anneila I. Sargent Randall K. Smith George Sonneborn Sumner Starrfield Alan T. Tokunaga Virginia Trimble C. Megan Urry John Vallerger Thomas R. Williams	Beth Willman Lee Anne M. Willson Robert F. Wing
--	--	---	--	---

NOVA: \$250-\$499

Anonymous (3) Ronald J. Adams - In Honor of Stewart Sharpless, Conrad Sturch, and Edward Chupp Edward A. Ajhar Katherine A. Alatalo Thomas T. Army Robert M. Ayers	Thomas R. Ayres Kevin H. Baines David F. Bartlett George Fritz Benedict Jeffrey Bennett Karen S. Bjorkman Gina Brissenden C. Richard DeVore Debra M. Elmegreen Larry W. Esposito	Richard Tresch Fienberg James Nathan Fry Richard F. Green Michael Hauser Deidre Ann Hunter Kenneth J. Johnston Debbie Kovalsky Richard B. Larson Kevin B. Marvel Alice K. B. Monet	Tom Montemayor James M. Moran, Jr. Robert W. O'Connell John O'Meara Saul Perlmutter Eric L. Sandquist S. Christian Simonson, III Harold Spinka William L. Stein Robert E. Taylor, M.D.	R. Brent Tully Aparna Venkatesan Stuart N. Vogel Glenn M. Wahlgren Constance E. Walker William J. Welch Robert E. Wilson Adolf N. Witt Richard W. Zurek
---	---	---	---	---

SUPERGIANT: \$100-\$249

Anonymous (3) Thomas B. Ake, III Adrienne Allen David C. Applebaum Fran Bagenal Jenny Baker Bruce Balick Kenneth Behar James F. Bell, III Lance A. M. Benner Edgar Bering Robert J. Boyle Joel N. Bregman G. Stanley Brown Spencer L. Buckner Jack O. Burns John E. Carlstrom John I. Castor Paul A. Catacosinos Apostolos Christou Frederick R. Chromey Benton Clark	Harold G. Corwin, Jr. Patrick Crane Robert J. Davis Debra M. Elmegreen Joshua P. Emery Steven Robert Federman William R. Forman William J. Forrest Otto G. Franz Wendy L. Freedman Kenneth C. Freeman Ruth Frey Antoinette B. Galvin Catharine D. Garmany John E. Gaustad Andrea M. Ghez Randy Gladstone Donald Groom Mona J. Hagyard Andrew I. Harris Louis C. Haughney David J. Helfand	Amanda Hendrix James E. Hesser John M. Hill Alan W. Hirshfeld Jon Todd Hoeksema David E. Hogg Kelly Holley-Bockelmann Ellen S. Howell Chris David Impey Anne Jaskot Mark C. Jennings Chelen H. Johnson Harrison P. Jones Stephen W. Kahler Eiji Kambe Stephen L. Keil Robert C. Kennicutt, Jr. John G. Kirk R. C. Kirkpatrick David C. Koo Eric J. Korpela Kristine Larsen	Stephen S. Lawrence Albert Lazzarini John W. Leibacher Alan M. Levine Charles Liu James C. Lochner Felix J. Lockman James D. Lowenthal Roger Lynds Renu Malhotra Herman L. Marshall John C. Mather Christopher W. Mauche Richard McCray Christopher F. McKee Stewart Moses Stuart Mufson M. S. Oey Knut A. Olsen Glenn S. Orton Lyman Alexander Page Eugene N. Parker	Charles J. Peterson Catherine A. Pilachowski Frederic A. Rasio John C. Raymond Robert D. Reasenberg Stephen T. Ridgway Jane R. Rigby George Robinson Jeffrey D. Rosendhal Kenneth S. Rumstaj Didier Saumon Daniel J. Schroeder Kristen Sellgren Stephen J. Shawl Suneel I. Sheikh David R. Silva Amy A. Simon Dava Sobel John R. Spencer David N. Spergel Gordon K. Squires Andrew J. Steffl
--	--	---	--	---

SUPERGIANT: \$100-\$249

David J. Stevenson
Peter Stockman
Curtis Struck
Woodruff T. Sullivan, III
Theodore D. Tarbell

Elizabeth P. Turtle
Stephen C. Unwin
Richard Wagener
Frederick M. Walter
Robert L. Warasila

Amelia F. Wehlau
Alycia J. Weinberger
Kay Weiss
Lisa Ann Wells
James G. Williams

Robert E. Williams
Beth Willman
Steven P. Willner
Beverley J. Wills
Lee Anne M. Willson

Charles E. Woodward
Donald K. Yeomans

GIANT: UP TO \$99

Anonymous (16)
Loren Acton
Lori Allen
Barbara J. Anthony-Twarog
Keith A. Arnaud
Phil Arras
Dana E. Backman
John D. R. Bahng
Paul Everett Barrett
Kenneth P. Bechis
Yuto Bekki
Peter L. Bender
Richard A. Berg
Mary Bishop
Samuel Bishop
Laura Blecha
Jane B. Blizzard
Robert D. Blum
Peter Bodenheimer
Richard S. Bogart
Mark Bottorff
Richard P. Boyle, S.J.
Robert J. Boyle
Paul A. Bradley
Hale Van Dorn Bradt
David Brain
Daniel K. Brocius
Crystal L. Brogan
Giovanni Bruno
James Burke
Devon M. Burr
Saida M. Caballero-Nieves
Ana Cristina Cadavid
John L. Callas
George Carteris
Ryan Carteris
Caitlin Casey
Daniel B. Caton
Paul W. Cauley
Carlos Cersósimo
Raphael M. Chen, Esa
Bella Chao Chiu
Edward B. Churchwell
Beth Ellen Clark
Geoffrey C. Clayton

Lauren Ilseadore Cleeves
Regina J. Cody
Jason C. Cook
Lia Corrales
Benjamin Coughenour
Serena Criscuoli
H. Thankful Cromartie
Ingrid Daubar
William Scott Davis
Christopher G. De Pree
Megan E. DeCesar
Hélène R. Dickel
Mark Dickinson
Harriet L. Dinerstein
Megan Donahue
Tom English
J. Emilio Enriquez
Fred T. Erskine, III
Erlan H. Feria
Yanga R. Fernandez
Lynn S. Fischer
William R. Forman
Karl Forster
Peter M. Garnavich
Jonathan Gelbord
Tomas E. Gergely
Douglas R. Gies
J. A. Giordmaine
John W. Glaspey
Jay D. Goguen
Jeremy Goodman
David T. Gregorich
Noreen A. Grice
David Grinspoon
Ivan Grosz
Edward F. Guinan
Linda Gunshefski
Mark A. Gurwell
Shadia R. Habbal
Daryl Haggard
Stephanie Hamilton
Candice Hansen
Katherine Haramundanis
Saeko S. Hayashi
William D. Heinze

Todd J. Henry
Shea A. Hess Webber
Klaus W. Hodapp
Veronica Hoffman
Elliott Horch
David H. Hough
Ward S. Howard
Hugh S. Hudson
Charles Hull
William M. Irvine
Carole Jackson
David C. Jenner
David Geoffrey Johnson
Manasvita Joshi
Erin Kara
Tiffany Kataria
Michael Louis Katz
Michael S. W. Keeseey
Thomas Kelsall
Stephen M. Kent
Patricia Knezek
Arieh Konigl
Kathleen E. Kraemer
Yoshio Kubo
Therese A. Kucera
Russell M. Kulsrud
Steven H. Langer
Larry A. Lebofsky
Larry Lesyna
Harold F. Levison
David H. Levy
Mark C. Lewis
Yunyang Li
Jeffrey Linsky
Tim Lister
Timothy A. Livengood
Felix J. Lockman
Katherine J. Mack
Paul MacNeil
Dale E. Mais
Dipankar Maitra
Jim Manning
Jean-Luc Margot
Joseph R. Masiero
Sam Mason

Stephan R. McCandliss
Stephen McCluskey
Liam McDaid
Ashley Thomas McDermott
Lucy-Ann A. McFadden
David D. Meisel
Kate Meredith
Richard A. Mewaldt
Beatrice E. A. Mueller
Edmond Murad
Jim Murphy
Robert Lucien Mutel
Philip D. Nicholson
Dara J. Norman
Wayne Osborn -
**In Memory of
Michael A'Hearn**
Lucas Paganini
Thomas Pannuti
Robert T. Pappalardo
Annika Peter
William L. Peters
J. Sebastian Pineda
Rebecca L. Pitts
David A. Pooley
Simon Porter
Lisa A. Prato
Francis A. Primini
Zhongquan Qu
Jani Radebaugh
Paul B. Reid
Matthias D. Rempel
Kurt D. Retherford
Stephen P. Reynolds
Edward Rhodes
George Rieke
Robert Rowe
Gwen C. Rudie
Jane L. Russell
James M. Ryan
Audrey Salo
Diego Paul Sanchez Lana
Malcolm P. Savedoff
Edward G. Schmidt
Jesper Schou

Daniel A. Schwartz
Andrea E. Schweitzer
Karen Seiter
Lorenzo E. Sepulveda
Frederick D. Seward
William W. Shane
D. E. Shemansky
Denis Shulyak
Bruno Sicardy
Kelsi N. Singer
Edward C. Sittler, Jr.
J. Allyn Smith
Lawrence A. Sromovsky
Ian Steer
Peter A. Sturrock
Jean Hebb Swank
Theodore D. Tarbell
C. Bruce Tarter
John R. Thomas
Gabriela Urbanova
Martin Urbanec
Lynne A. Valencic
Jacqueline Villadsen
Jess Vriesema
Jan M. Vrtilik
Brian Welsch
Michael W. Werner
R. Stephen White
Daryl Willmarth
Debra Winegarten
Michael H. Wong
Tony H. Wong
J. M. Wrobel
Ryan Wyatt
Rakesh Kumar Yadav
Hsiang-Yi Karen Yang
Jason Young
Clyde S. Zaidins
Michael Zeilik, II
Qirong Zhu
Andrew John Zic

INSTITUTIONAL SPONSORS

AAS IOP Ebooks
AAS Publishing
Alabama at Tuscaloosa, Univ. of
American Chemical Society
American Institute of Physics (AIP)
Andor/Apogee
Applied Physics Laboratory
Arizona, Univ. of
Associated Universities, Inc.
Astro Haven Enterprises
Astrometric Instruments, Inc.
AURA
Ball Aerospace & Technologies Corp.
Boston Univ.
Brigham Young Univ., Provo
California at Berkeley, Univ. of
California at Santa Cruz, Univ. of
California Institute of Technology
Carnegie Institution for Science
Chicago Trading Company
Chicago, Univ. of
Columbia Univ., Dept of Astronomy
Denver, Univ. of
DFM Engineering, Inc.
Embry-Riddle Aeronautical Univ.
George Mason Univ.
George Washington Univ., Physics Dept
Georgia State Univ.
GMTO Corporation
Harvard Univ.
Illinois at Champaign-Urbana, Univ. of - Dept of Astronomy
Illumination Works, LLC
Indiana Univ., Bloomington
Institute for Research on Exoplanets - IREx
Johns Hopkins Univ.
Kansas, Univ. of
Lawrence Livermore National Laboratory, Univ. of California
LSST Corporation
Lunar and Planetary Laboratory, Univ. of Arizona
Maria Mitchell Observatory
Maryland at College Park, Univ. of
Massachusetts at Amherst, Univ. of
Massachusetts Inst. of Technology, Dept of Physics
Michigan, Ann Arbor, Univ. of
Minnesota at Twin Cities, Univ. of
NANOGrav
NASA's Science Mission Directorate
National Optical Astronomy Observatory (NOAO)
National Radio Astronomy Observatory (NRAO)
National Science Foundation
Nature
New Mexico State Univ.
New Mexico Tech
New Mexico, Univ. of
Northrop Grumman
Northwestern Univ.
Oklahoma, Univ. of
Orbital ATK
Pennsylvania State Univ.
Pennsylvania, Univ. of
Princeton Univ.
Princeton University Press
Rochester Institute of Technology
Royal Society Publishing
Rutgers Univ., Camden
Saint Luke's Foundation, LLC
San Diego State Univ.
SBIG / Diffraction Limited
SETI Institute
Simons Foundation
Software Bisque Inc.
Southwest Research Institute - Boulder
Southwest Research Institute - San Antonio
Space Science Institute
SSERVI - VORTICES
STScI
Teledyne Imaging Sensors
Texas A&M Univ., College Station
Texas at Austin, Univ. of
Texas at San Antonio, Univ. of
Texas Christian Univ.
Texas Tech Univ., Physics Dept
TMT, Thirty Meter Telescope International Observatory, LLC
U.S. Army Night Vision and Electronic Sensors Directorate
Universities Space Research Association (USRA)
University of Arizona Press
Utah, Univ. of
Uwingu, LLC
Virginia, Univ. of
W.W. Norton, Inc
Washington at Seattle, Univ. of
West Virginia Univ.
Wisconsin at Madison, Univ. of
Woodland Hills Camera & Telescopes
World Scientific Publishing Co.
Wyoming, Univ. of
Yale Univ.

IN MEMORIAM

The Society was saddened during 2017 to learn of the passing of the members listed. The Society, through its Historical Astronomy Division, strives to publish an obituary for each AAS member after we are informed of the member's death. Obituaries are published and available online through the AAS web pages. A complete index is available at aas.org/obituaries.

Michael F. A'Hearn

Akiva Bar-Nun

Barbara Bell

Giovanni Fabrizio Bignami

Erika Böhm-Vitense

Edward L. Chupp

Michel Combes

Armand H. Delsemme

Dale Flint Dickson

Von Russel Eshleman

Enrique García-Berro Mo

Robert F. Garrison

Neil Gehrels

Joseph M. Hilbe

Pierre Kaufmann

Yoji Kondo

Adair P. Lane

John K. Lawrence

Albert Paul Linnell

Jeffrey E. McClintock

Jerry Earl Nelson

Tobias C. Owen

Theodore P. Stecher

Gary Steigman

George W. Swenson Jr.

Patrick Thaddeus

Arthur R. Upgren

Harold F. Weaver

Charles A. Whitney

Ramon D. Wolstencroft

THE BOARD OF TRUSTEES & AAS STAFF

2017 OFFICERS

President Christine Jones, Harvard-Smithsonian, CfA

President Elect Megan Donahue, Michigan State Univ.

Senior Vice-President Chick Woodward, Univ. of Minnesota

Second Vice-President James D. Lowenthal, Smith College

Third Vice-President Michael Strauss, Princeton University

Treasurer Nancy D. Morrison, Univ. of Toledo

Secretary G. Fritz Benedict, Univ. of Texas, Austin

Publications Board Chair Tim Bastian, NRAO

Education Officer Charles Liu, CUNY College of Staten Island

Executive Officer Kevin B. Marvel

TRUSTEES

2015-2018

Daniela Calzetti, Univ. of Massachusetts

Sally Oey, Univ. of Michigan, Ann Arbor

Nancy Chanover, New Mexico State Univ.

2016-2019

Adam Burgasser, UC San Diego

Jessica Kirkpatrick, Hired Inc.

Jenny E. Greene, Princeton Univ.

2017-2020

Marcel Agüeros, Columbia Univ.

Kelle Cruz, CUNY Hunter College &

Kelsey Johnson, Univ. of Virginia

EXECUTIVE OFFICE STAFF

Kevin B. Marvel, Executive Officer

Alexandra Aguilera, Editorial Assistant

Sara Asfaw, Staff Accountant & Grants Contact

A. Renée Battle, Director of Meeting Services

Heather Bloemhard, John Bahcall Public Policy Fellow

Gina Brissenden, Education & Outreach Coordinator

Sherrie Brown, Membership Services Administrator

Kelly E. Clark, Chief Financial Officer

Kathy Cox, Meetings Abstract Administrator

Lynn Ervin, Registrar & Meetings Coordinator

Rick Fienberg, Press Officer

Brian Frank, Help Desk Specialist

Diane Friendak, Director of Membership Services

Scott Idem, Director of Information Technology

Susanna Kohler, Editor, AAS Nova

Debbie Kovalsky, Director of Exhibits and Development

Justin Maciak, Systems & Network Administrator

Stephen P. Maran, Senior Advisor to the Executive Officer

Mary Mathias, Content Editor & Website Coordinator

Gus Muench, Journals Data Scientist

Joel Parriott, Deputy Executive Officer & Director of Public Policy

Greg Schwarz, Journals Data Specialist

Kidist Shiferaw, Financial Analyst

Janice Sexton, Editorial Operations Manager

Julie Steffen, Director of Publishing

Crystal Tinch, Communications & Engagement Coordinator

The mission of the American Astronomical Society is to enhance and share humanity's scientific understanding of the universe.



1667 K Street NW, Suite 800
Washington, DC 20006, USA
aas.org