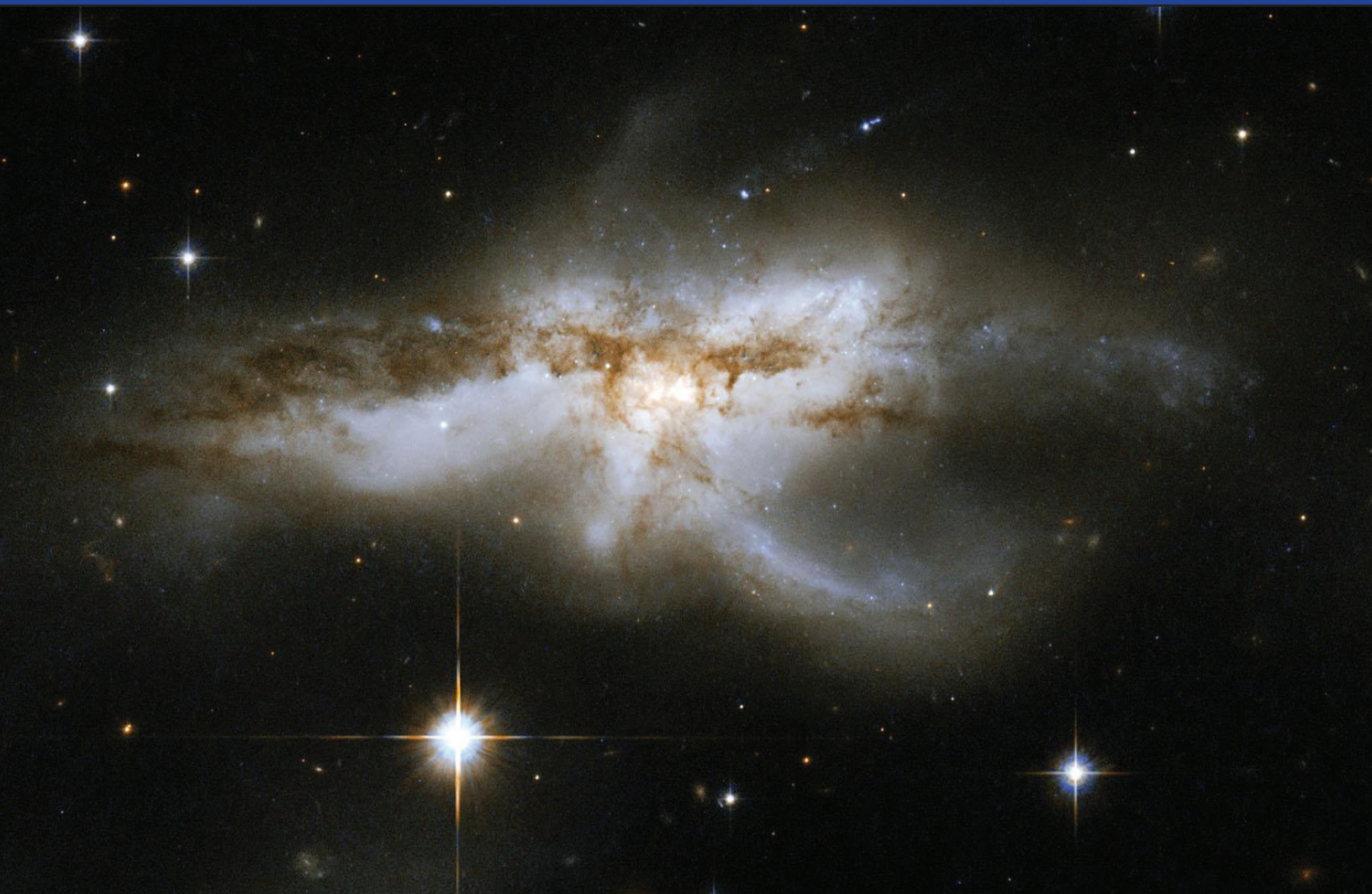


# 2020

## Annual Report



## TABLE OF CONTENTS

3	President's Message
5	Executive Officer's Message
6	Membership
7	AAS & Division Meetings
10	Publishing
11	Public Policy
12	Education & Outreach
14	<i>Sky &amp; Telescope</i>
15	AAS Fellows
16	Media Relations
17	Divisions, Committees, Working Groups & Task Forces
18	Financial Report
20	Prizewinners
21	AAS Donors
22	Institutional Sponsors
23	In Memoriam
23	Board of Trustees
23	AAS Staff

## 2020 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.

*Established in 1899, the American Astronomical Society (AAS) is a major international organization of professional astronomers, astronomy educators, and amateur astronomers. Its membership also includes physicists, geologists, engineers, and others whose interests lie within the broad spectrum of subjects now comprising the astronomical sciences.*



## PRESIDENT'S MESSAGE: PAULA SZKODY

This has been an unanticipated, unusual first year as AAS President, constrained yet not destroyed by the global pandemic. Despite the challenges it presented, this has been a productive year. We have weathered three virtual meetings, with record attendance of members as well as the press. While some aspects suffered, especially interaction with exhibitors, job seekers meeting up with employers, and undergrads meeting grad school reps, more people were able to hear the plenary and oral speakers and browse the iPosters without incurring the expense of travel. The three venues missed (Madison, Phoenix, and Anchorage) are scheduled for future in-person meetings, which are planned to resume with the next January meeting in Salt Lake.

Productive science went on, albeit families with school-age children at home had greater difficulties carving out a workspace and time. The AAS journal input numbers were up, especially for the *Planetary Science Journal* and *Research Notes of the AAS*. *Sky & Telescope* won two awards for its science writers. Astronomy was highlighted to the world with AAS members Reinhard Genzel and Andrea Ghez winning the 2020 Nobel Prize for their breakthrough science on the central black hole in our galaxy, and Victoria Kaspi and Chryssa Kouveliotou sharing the 2021 Shaw Prize for their work on the properties of magnetars. Thirty-one members received recognition for their outstanding science, as well as service to astronomy, with an AAS Fellows Award.

With extra needs fueled by the pandemic and extra funding to be distributed by federal agencies, the AAS Committee on Astronomy

and Public Policy (CAPP) was very busy with letters to various agencies and congressional members about budgets with augments for NSF, NASA, and DOE, and the needs of early career astronomers. Thanks are due to Joel Parriott, Kelsie Krafton, and the other CAPP members for their prompt attention to issues as they arose. CAPP is also preparing for the emergence of the Astro2020 Decadal report this summer, and Megan Donahue is chairing a group that will enable its advocacy.

All existing and developing telescopes took a hit with closures for months to protect the safety of employees. While most have now reopened on a close to normal schedule, the ones under construction have suffered schedule slips of one month (James Webb Space Telescope), several months (Roman Space Telescope) and a year (Vera Rubin Observatory). The biggest loss this year occurred with the collapse of the Arecibo telescope. The cleanup is ongoing, while the future of the radio observations is under discussion during a workshop this month (June 2021).

The launch of Low Earth Orbit (LEO) satellites continued throughout the year. As of writing, there have been 610 Starlink launches this year, with about 1,500 total currently in orbit. SpaceX has been approved to operate up to 2,814 in 540-570 km high orbits. To mitigate the effects for observers, they have used paint and visors to bring the magnitudes close to the threshold recommended by astronomers. The low orbits will primarily affect twilight times for observers. OneWeb currently has 146 satellites in orbit with 648 planned. These orbits are higher, making them fainter but

present for most of the night. Other groups are also planning LEOs. The number, visibility and radio interference issues are being actively pursued by the AAS Committee on Light Pollution, Radio Interference and Space Debris (LPRISD). Along with NOIRLab and the NSF, they hosted a workshop called SATCON1 in summer 2020, with a report issued in August that detailed the satellite effects and remedies needed. A follow-up workshop is scheduled this year for 12-16 July that will focus on policies and regulations. The group is also working with the IAU and the United Nations Committee on the Peaceful Uses of Outer Space to resolve what can be done. Special thanks are due to Jeff Hall, the chair of LPRISD, and members Connie Walker, Pat Seitzer, James Lowenthal, and Richard Green, who have all contributed many hours to the satellite issue in the last year.

The other entities of AAS have also been productive. In February, the Education Committee launched a blog that highlights education activities supported by the AAS as well as delves into topics of interest and connections to resources. In April, the website for departments to share their progress in the adoption of the Astronomy Graduate Education Report went live (<https://aas.org/comms/task-force-diversity-and-inclusion-graduate-astronomy-education>) and eight departments have responded. It is hoped that all departments will enter so that undergraduate students have a way to check out departments when they are applying to grad schools. The Committee on the Status of Women in Astronomy (CSWA) completed their strategic plan for the 2020s and posted it on their website in August 2020. The National Osterbrock Leadership Program Committee reviewed and awarded matching funds for four years (provided by the Peter and Patricia Gruber Foundation to the AAS) to Columbia University and UC Irvine for

their graduate leadership proposals. Thanks to a Board-approved recommendation from VP Joan Schmelz, all committees and working groups are creating and maintaining a Standard Operating Procedure document that will be archived and linked on each website. This will help ensure corporate memory when committee membership changes and provide a detailed account for members to consider when volunteering for committees. The Board approved term limits (two 3-year terms) for the Secretary and Treasurer that will allow for the long ramp-up time for these positions but provide for changeover for fresh ideas. Secretary Alice Monet worked with OpenWater for prize nominations to make the input easier for both nominators and nominees.

The Strategic Assembly (the Board and Division and Committee Chairs) continued its work on the Strategic Plan with monthly virtual meetings from September to December followed by a five-person final writing committee that handled suggested revisions. The final Strategic Plan was approved by the Board in early summer and is posted on the AAS website. This plan is meant to be improvements to focus on for the next five years, while still maintaining the AAS excellence in its primary activities of enabling astronomical science through publishing top journals, hosting meetings of its members, and advocating for astronomy issues and education.

I hope everyone found ways to cope with and enjoy the sequestering that was thrust on us. My escapes were hikes in the country to find new inanimate friends as well as to enjoy six-foot-distanced soirees in open-air garages with long-time friends as pictured below. The end is now here (at least for most of the vaccinated) and I look forward to seeing many of you in Salt Lake City!





## EXECUTIVE OFFICER'S MESSAGE: KEVIN B. MARVEL

And what a year it was...wow. I wrote the last annual report text shortly after our successful June 2020 virtual meeting, well before the worst impacts of the coronavirus pandemic had been felt in the US. At the time I was very proud of our staff, who pivoted quickly to put on a virtual conference in just over two months' time,

adapted to working remotely, and worked hard to keep themselves and their families safe and healthy. With infections dropping during the summer, it seemed we may have been over the hump. Little did I know we had several larger humps coming down the pike during fall and spring 2020.

We've collectively lived through a traumatic pandemic that has turned our normal routines upside down, put extreme stress on us all and threatened the health and wellbeing of everyone on the planet. Millions have tragically died, while millions more have been and continue to be at risk around the world. Thankfully, due to scientific research and efficient manufacturing efforts, vaccines are available and will reach most people in the coming year or two. We are all hopeful for a positive future and although we may yearn for a return to how things used to be, the "new normal" will be different for everyone.

Despite the challenging times, the AAS has accomplished quite a lot over the past year. We continued to regularly publish our journals and we were surprised and pleased that the number of manuscripts submitted during 2020 grew and was well above average for several periods during the year, a trend that is continuing in 2021. At least some of us were able to use our saved commute time to move forward on some research, or at least write up that research and submit it for peer review and publication. To those that did, thank you for publishing with us and thank you to those who volunteered to serve as referees. We believe community-owned and -operated journals are the best way to move our discipline forward and we will continue to operate our publications with that spirit.

AAS President Paula Szkody has led the Strategic Assembly forward to completion of a new Strategic Plan with the help of Past President Megan Donahue who got the process started. It is a robust and visionary plan with tangible goals that will help us make progress in many areas. I and the AAS staff are looking forward to building an operational plan to support the Society as we make progress on the goals the plan lays out. The Strategic Assembly will then move into a monitoring mode, meeting twice yearly to review progress on the Strategic Plan and make adjustments if needed. The Strategic Assembly and, in fact, our entire governance structure and process were recreated through a Governance Task Force several years ago. The Board of Trustees, responsible for the oversight of our ongoing operation, will be reviewing the current governance operation and might make small adjustments to how things work now, but it appears the new structure and processes have helped create a more engaged and efficient operation — exactly like they were meant to.

Our staff have done a great job working remotely and I'm so proud of everyone adjusting to this mode of work. Our meetings team organized multiple successful virtual conferences, three for the Society and several for our Divisions. Surveys of attendees indicate they enjoyed these conferences, although most missed the in-person interactions with colleagues. We are planning to carry some virtual content for our future meetings and may eventually migrate one or more of our conferences to a fully virtual mode. Our finance and operations team have managed to keep all of our normal business functions running smoothly, ensuring bills are paid, payroll is processed, and all transactions are booked carefully and accurately. This attention to detail has resulted once again in a clean audit, making this 13 years in a row for our Society.

Our communications and marketing team have kept our biweekly digest, calendar, website, and other communications running smoothly and helping to connect our members together and keeping them informed. Despite the challenges of virtual advocacy visits, our public policy team have actually been extremely effective this year on multiple issues, especially the issue of low earth orbit satellite constellations. With the help of members of the Committee on Light Pollution, Radio Interference, and Space Debris, they connected with relevant industry players and moved forward on a strategy of engagement, which led directly to modified satellite versions being launched to help mitigate the brightness of the satellites. Although it is not a solved problem, they have established a way forward on this issue, one I think will work well over time. Our membership services continued throughout the year and we were happy to provide an expanded webinar series providing career advice and guidance. These are archived on the AAS website and available on the AAS YouTube channel along with a whole range of interesting video content. *Sky & Telescope* has continued to be published regularly and we are making adjustments with various vendors to streamline operations, improve services, and make the magazine and online content better. Our WorldWide Telescope effort crossed a threshold into robust, reliable operation fully delivered through the web version and efforts have been made to expand the use of this amazing tool.

Finally, I want to highlight our retiring Press Officer, Rick Fienberg. Rick will be retiring in September of 2021 after many years of dedicated service to the Society. Rick led our press operation exceptionally well, but has done so much more for the Society than just manage our press operations at our meetings, our press release distribution service, and help connect reporters to relevant scientists. In addition to serving as our ultimate copy editor for external communications, he stepped forward to help lead the solar eclipse task force and has helped us in many other ways besides. As I write this in July of 2021, he has only a few weeks remaining with us, but he is not slacking off one bit. We may lose him as a Press Officer, but we'll keep him around as an engaged volunteer for many years to come I am sure. Thanks Rick, for accepting the offer to work for the Society so many years ago and your passionate support of the AAS and its goals through your efforts.

## MEMBERSHIP

For some members, the AAS presents the ultimate opportunity to support the Society in its mission to enhance and share humanity's scientific understanding of the universe. Others like the prestige of belonging to the major professional society of astronomers in North America. There are additional tangible benefits such as discounts and the possibility of winning grants or awards, but most members think beyond themselves. As a member, you'll personally get something of value with your dues and at no additional cost, you generate value for those with whom you share a common bond. Our member community drives the Society's meetings, journals, and public policy efforts, which, in turn, become the engines for bold new discoveries in the quest to understand the cosmos.

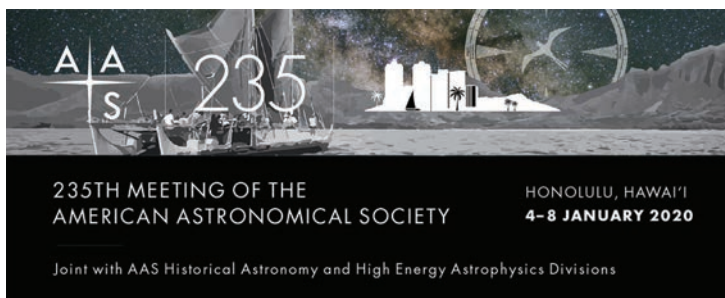
### 6,227 US MEMBERS

CA	1088	HI	150	MN	74	NH	32	VT	12
MD	659	NJ	150	NC	60	KS	30	NE	11
MA	443	MI	135	TN	52	OK	25	PR	11
AZ	379	FL	134	WV	51	ME	23	ID	8
NY	302	WA	131	AL	50	NV	22	AK	7
TX	264	OH	114	MO	47	MT	20	SD	5
CO	250	WI	105	OR	44	WY	18	ND	3
VA	224	GA	100	IA	39	LA	17	MS	3
PA	201	IN	91	SC	39	RI	14	VI	2
IL	170	DC	89	KY	35	DE	14		
NM	156	CT	78	UT	33	AR	13		

### 719 NON-US MEMBERS

Canada	156	Taiwan	16	Sweden	5	Lebanon	2	Argentina	1
United Kingdom	64	Spain	15	Czech Republic	4	Iceland	2	Georgia	1
Japan	64	Mexico	15	Ireland	4	Hong Kong	2	Hungary	1
Germany	61	Brazil	7	Austria	4	Trinidad and Tobago	1	Estonia	1
Republic of Korea	35	Israel	7	Finland	4	Sri Lanka	1	Serbia	1
Australia	35	Belgium	6	Singapore	3	Honduras	1	Turkey	1
Chile	27	Denmark	6	United Arab Emirates	3	Peru	1	Luxembourg	1
Netherlands	27	Greece	5	Holy See (Vatican City)	3	Uruguay	1	Ethiopia	1
France	26	Russia	5	Poland	3	Latvia	1	Slovenia	1
Italy	22	Norway	5	Bahrain	2	New Zealand	1	Macao	1
China	21	India	5	Colombia	2	Portugal	1	Cyprus	1
Switzerland	19	South Africa	5	Egypt	2	Costa Rica	1		

## AAS & DIVISION MEETINGS



The year 2020 got off to its usual start with the Super Bowl of Astronomy — more prosaically known as the AAS winter meeting — in Honolulu, Hawai‘i. From 4 to 8 January 2020, a near-record number (more than 3,600) astronomers, students, educators, and journalists gathered at the Hawai‘i Convention Center for the AAS 235, held jointly with our Historical Astronomy and High Energy Astrophysics Divisions (HAD & HEAD). Little did we suspect that it would be the last in-person conference any of us would attend for more than a year thanks to the onset of the COVID-19 pandemic shortly thereafter.

The HAD meeting included two Special Sessions about 100th anniversaries: “Centennial of Eddington’s Solar Eclipse Tests of Einstein’s General Relativity” and “IAU-100: Celebrating 100 Years of International Astronomy” about the International Astronomical Union. Astro-historian Robert W. Smith (University of Alberta), recipient of HAD’s 2020 LeRoy E. Doggett Prize for his scholarship and writing on the history of NASA’s space telescopes, gave his prize lecture, “From the Invention of Astrophysics to the Space Age: The Transformation of Astronomy 1860-1990.”

HEAD hosted two Special Sessions: “Are Disks Just Disks? The Commonalities of Protoplanetary and Black Hole Accretion” and “Black Holes in the Mass Gaps.” Brian Metzger (Columbia University) and Daniel Kasen (University of California, Berkeley) presented the HEAD Bruno Rossi Prize lecture about their work predicting the electromagnetic signatures from radioactive nuclei produced in neutron star mergers.

Suvi Gezari (University of Maryland), the meeting’s Fred Kavli Plenary Lecturer, presented “Black Holes Snacking on Stars: A Systematic Exploration of Transients in Galaxy Nuclei” based on her studies of tidal disruption events. Sheperd S. Doeleman (Center for Astrophysics | Harvard & Smithsonian) gave the Lancelot M. Berkeley – New York Community Trust Prize lecture on how the Event Horizon Telescope produced its ground-breaking image of the black hole at the center of galaxy M87.

Ann M. Boesgaard (University of Hawai‘i) presented the Henry Norris Russell Lecture about her work using light-element abundances to test Big Bang nucleosynthesis and to probe stellar structure and stellar evolution. Via an exchange with the Royal Astronomical Society (RAS), the AAS Russell lecturer also gives a talk at an RAS meeting, and in return the recipient of the RAS Gold Medal in Astronomy speaks at one of our meetings. In Honolulu



we heard from Robert C. Kennicutt (University of Arizona and Texas A&M University), who received the 2019 Gold Medal for his contributions to understanding star formation in galaxies and to determining the value of the Hubble constant.

The Dannie Heineman Prize for outstanding mid-career work in the field of astrophysics is given jointly by the AAS and the American Institute of Physics. Giving his prize lecture at AAS 235 was Edwin (Ted) Bergin (University of Michigan), who was honored for his work in astrochemistry — especially his innovative contributions to our understanding of the physics and chemistry of star and planet formation — and for his tireless efforts to improve diversity and inclusion in astronomy.

Rounding out the prize lectures at AAS 235 were Daniel R. Weisz (University of California, Berkeley), recipient of the Newton Lacy Pierce Prize for his research on the star-formation histories of dwarf galaxies in the Local Group, and Jo Bovy (University of Toronto), whose contributions to our understanding of the structure and dynamics of the Milky Way and his work on forward modeling of large scientific data sets netted him the Helen B. Warner Prize (and, soon thereafter, the Vera Rubin Early Career Prize from the AAS Division on Dynamical Astronomy).

The late Kālepa Baybayan and Kala Baybayan Tanaka (Polynesian Voyaging Society) spoke on Hawaiian celestial navigation, Timothy Heckman (Johns Hopkins University) on galaxy evolution, Andrea Dupree (Center for Astrophysics | Harvard & Smithsonian) on stellar chemistry, Jennifer van Saders (University of Hawai‘i) on stellar structure and variability, Jason Hessels (ASTRON & University of Amsterdam) on fast radio bursts, Peter Eisenhardt (Jet Propulsion Lab) and James De Buizer (SOFIA Science Center) on the future of infrared astronomy, and Hawaiian language advocate Amy Kalili (‘Ōiwi TV) on the stewardship of Maunakea from the perspective of both the Hawaiian and the astronomical communities.

The HAD and HEAD Special Sessions were among more than three dozen such gatherings. Others included “Astrobiology and the Search for Intelligent Life in the 2020s,” “Breakthrough Science with the Atacama Large Millimeter/submillimeter Array,” “Gravitational-Wave Astronomy: The LIGO-Virgo Third Observing Run and Plans for the Future,” “NASA’s Parker Solar Probe: First Encounters with the Sun,” “New Horizons Results at 2014 MU69,” “Survival Skills for Astronomers: Posters, Presentations, and Proposals,” and “Transient Science with TESS.”

Once the coronavirus pandemic took hold in March 2020, we had to scramble to switch our 236th meeting in June — for which we already had about 300 abstracts and more than 600 registrants — from an in-person gathering in Madison, Wisconsin, to a fully virtual meeting. The AAS staff sprang into action to evaluate our options, with help from our information technology and audiovisual contractors, and we miraculously had a virtual platform set up and ready to go in less than two months. By the time our first-ever all-online meeting got under way, we'd doubled the number of abstracts and more than doubled the number of registrants, drawing astronomers from across the globe and making AAS 236 one of the most diverse meetings in the Society's history.

The virtual meeting, held jointly with our Laboratory Astrophysics Division (LAD) and Solar Physics Division (SPD), kicked off with the Fred Kavli Plenary Lecture by Lisa Kaltenegger (Carl Sagan Institute, Cornell University), a world leader in the search for signs of life on exoplanets that could be detectable with ground- and space-based telescopes. The theme of LAD's sessions was "Bridging Laboratory & Astrophysics," and in a special LAD plenary talk Paola Caselli (Max Planck Institute for Extraterrestrial Physics) emphasized how astrochemistry and molecular spectroscopy inform our understanding of star and planet formation. Kazunari Shibata (Kyoto University), recipient of the SPD 2020 George Ellery Hale prize, have a prize lecture about his work on solar flares and space weather.

Other prize and invited talks included those by Elisabeth Mills (University of Kansas) on the mysterious center of our Milky Way galaxy and Jo Dunkley (Princeton University) on ground- and space-based observations of the cosmic microwave background. Jacqueline Faherty (American Museum of Natural History) described recent progress in understanding brown dwarfs, and Christina Tremonti (University of Wisconsin, Madison) did the same for galaxy outflows.

Policy issues of importance to our profession were addressed in plenaries too. James Lowenthal (Smith College) and Sandra Cruz-Pol (National Science Foundation) considered the threats from satellite constellations to astronomy and the challenges of radio spectrum management, and Dara Norman (NSF's NOIRLab) explored the themes of diversity, inclusion, and access in the astronomical community and beyond.

Recent LAD awardees presented prize lectures throughout the meeting, including Lucy Ziurys (University of Arizona), recipient of the 2019 Laboratory Astrophysics Prize; Sarah Hörst (Johns Hopkins University), winner of the 2020 Early Career Award; and Natalie Hell (Lawrence Livermore National Laboratory), honored with the 2020 Dissertation Prize. We also heard from John Cowan (University of Oklahoma), who give a talk on the key contributions over four decades by James Truran (University of Chicago), recipient of the 2020 Laboratory Astrophysics Prize.

In addition to daily LAD and SPD sessions as well as regular contributed oral and iPoster sessions, the virtual meeting featured an assortment of topical Special Sessions and multi-

session Meetings-in-a-Meeting (MiM). Among the former were "Astronomy from the Moon: A New Frontier for 21st Century Astrophysics," "Diffuse X-Ray Emission from the Milky Way," "Dual-Anonymous Peer Review for NASA Astrophysics Proposals," "The Fermi Bubbles: Progress and Prospects," and "The NASA-NSF Exoplanet Observational Research (NN-EXPLORE) Program at the WIYN Observatory."

MiM sessions included "Supermassive Black Hole Studies with the LSST" (now the Vera C. Rubin Observatory) and "The Interstellar Medium of Galaxies in the Era of Big Data," both spanning all three meeting days (shortened from the usual four). All the technology we marshalled for the online conference worked well, including our virtual Exhibit Hall, and attendees told us via a post-meeting survey that they were quite satisfied with the experience, though of course they missed being able to see their friends and colleagues in person and looked forward to the resumption of in-person gatherings.

Alas AAS 237, originally scheduled in Phoenix, Arizona, in January 2021, had to be conducted as a fully virtual meeting too in light of the ongoing pandemic, which surged in the months leading up to it. Our winter 2021 online conference attracted more than 3,000 registrants, including 200 international attendees from 45 countries.

The AAS 237 Fred Kavli Plenary Lecture was given by Paul Demorest (National Radio Astronomy Observatory), a leader of NANOGrav, the North American Nanohertz Observatory for Gravitational Waves. He described progress toward detecting very-low-frequency gravitational radiation from a variety of cosmic sources, including supermassive black holes orbiting each other in the centers of galaxies.

Other prize talks included the Royal Astronomical Society Gold Medal lecture by Sandra Faber (University of California, Santa Cruz), who received the medal for her contributions to the design of large telescopes and novel instruments and for her outstanding research on galaxy structure, galaxy evolution, and cosmology. Scott Tremaine (Institute for Advanced Study) gave the career-capping Henry Norris Russell lecture, featuring insights into the dynamics of natural cosmic systems on scales ranging from comets to clusters of galaxies. Caroline Morley (University of Texas, Austin), recipient of the Annie Jump Cannon Award, described her innovative work on modeling the atmospheres of exoplanets and brown dwarfs. Helen B. Warner Prize winner Smadar Naoz (University of California, Los Angeles) presented the latest findings from her ongoing studies in cosmology and dynamics.

Christopher Kochanek (Ohio State University) presented the AAS/American Institute of Physics Dannie Heineman Prize lecture on his work combining observations and theory to investigate topics such as the lives and deaths of massive stars and the evolution of stellar populations in galaxies and quasars. Sheperd Doleman (Center for Astrophysics | Harvard & Smithsonian) provided an update on Event Horizon Telescope (EHT) imaging of supermassive black holes at the centers of galaxies, for which he and the EHT team received HEAD's Bruno Rossi Prize. And the recipient of HAD's Donald



E. Osterbrock Book Prize, Ileana Chinnici (National Institute for Astrophysics/Astronomical Observatory of Palermo, Italy), shared some stories from her prize-winning book *Decoding the Stars: A Biography of Angelo Secchi, Jesuit and Scientist*.

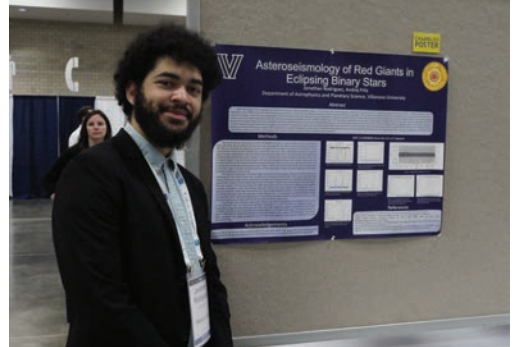
Other plenary lectures included David Chuss (Villanova University) on magnetic fields in astrophysically interesting environments, Priyamvada Natarajan (Yale University) on using gravitational lensing to infer and constrain the properties of dark matter, Lisa Randall (Harvard University) on the physics of the early universe, Adrian Price-Whelan (Flatiron Institute) on tidal streams in the Milky Way's halo as revealed by the Gaia space mission, Chris Packham (University of Texas, San Antonio) on accretion disks around supermassive black holes and planet-forming protostars, Marcelle Soares-Santos (Brandeis University) on the search for visible counterparts to gravitational-wave events, and Brian Nord (Fermilab) on the implications of artificial intelligence in science and society, in particular with respect to systemic racial discrimination. Sherry Suyu (Max Planck Institute for Astrophysics & Technical University of Munich) gave the closing plenary lecture on the work of the HOLICOW collaboration to measure the cosmic expansion rate, for which she was awarded the Lancelot M. Berkeley–New York Community Trust Prize for Meritorious Work in Astronomy. Her team's prize-winning research article confirms that "local" measurements of the expansion rate don't match up with values obtained by measuring certain properties of the early universe's cosmic microwave background radiation and extrapolating to the present using the standard cosmological model developed over the last few decades.

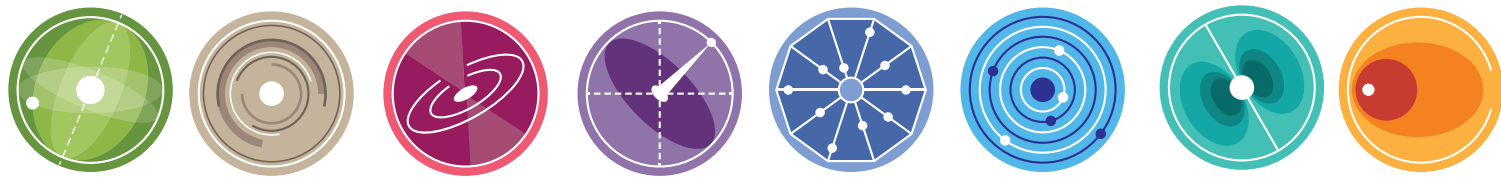
Among the many sessions of short talks and iPoster presentations were numerous Special Sessions on topics of keen interest to the astronomical community. Here's a sampling: "Massive Stars in Colliding Wind Binaries," "Radio Galaxies on All Scales," "Atmospheric Characterization of TESS Exoplanets," "New Views of Galaxy Formation and Evolution," "Assessing the Impact of

Stellar Feedback," "Dark Energy Survey: New Results and Public Data Release," "Subaru Prime Focus Spectrograph," "Astronomy Education in a Rapidly Changing World: Best Practices from Research and Instruction," "Astronomy and Satellite Constellations," "Scientific and Cultural Engagement with Arizona Indigenous Communities," and "A Discussion on Anti-Blackness in Astronomy." Based on feedback from attendees at AAS 236, we added more networking opportunities for AAS 237, including a "speed networking" session where randomly selected pairs of attendees were connected for a few minutes of informal conversation before everyone was switched up for another one, then another. All three AAS meetings between January 2020 and January 2021, including the two virtual ones, also featured a variety of public-policy Town Halls where attendees had the opportunity to hear from and ask questions of representatives from NASA, the National Science Foundation, the National Academy of Sciences, the national observatories (optical, radio, and solar), and numerous other funding agencies, ground-based astronomical facilities, and space-astronomy missions. Of particular note were multiple Town Halls related to the Astro2020 decadal survey.

### Division Meetings

The COVID-19 pandemic upended plans for our Divisions' 2020 meetings too. The Division on Dynamical Astronomy (DDA) switched its 51st annual meeting from Ithaca, New York, to a fully virtual conference in August 2020. The High Energy Astrophysics Division (HEAD) canceled its 18th meeting, scheduled in Tucson, Arizona, in September 2020; HEAD decided instead to hold some sessions at the 238th AAS meeting in June 2021 (which also ended up going virtual). The Division for Planetary Sciences (DPS), which had planned to hold its 52nd annual meeting in Spokane, Washington, in October 2020, opted for a virtual conference instead. As noted above, the Solar Physics Division (SPD) met with the AAS in June 2020; this was a last-minute change in lieu of a separate SPD meeting, with the switch being one more consequence of the pandemic.





The AAS publishing team started out the year with outreach activities at the AAS 235 Meeting in Honolulu. At the request of the Publications Committee, a public information session was held, as well as a special presentation to a lunch meeting with the Publications Committee and invited representatives from all AAS Divisions. A one-page informational pamphlet was distributed to all meeting attendees.

Because the AAS publishing team was already working together remotely, there was little adjustment to be made when the COVID-19 pandemic arrived (except for team members home schooling their children). Not one staff member or science editor came down with the virus in 2020, and until late in the year our publishing partners saw no lapse in service. Authors and reviewers were given extra time as needed in the peer review process. There were detailed instructions for readers on maintaining access to our content when working away from one's institution. The Annual Meeting of the Lead and Science Editors was held virtually in April 2020.

Our newest publication, *The Planetary Science Journal (PSJ)*, published its first articles in March 2020. Its downloads and citations have since skyrocketed, in part because it is Gold Open Access, which means all content is immediately accessible to everyone everywhere from the date of publication. *PSJ*'s Lead Editor is Faith Vilas (Planetary Science Institute) and its Science Editors are Brian Jackson (Boise State University), Edgard G. Rivera-Valentin (Lunar and Planetary Institute (USRA)), and Maria Womack (University of Central Florida).

To showcase the range of science presented at AAS meetings, *Research Notes of the AAS (RNAAS)* published *Focus on AAS 236*. Three other focus issues were published in AAS journals in 2020:

- Early Results from Parker Solar Probe: Ushering a New Frontier in Space Exploration
- Focus on Gravitational-wave Astrophysics from the Second LIGO-Virgo Transient Catalogue
- Focus on HST/COS Observations of Quasar Outflows in the 500–1050 Å Rest Frame

The *Bulletin of the AAS (BAAS)* was busy in its first full year of operations after its revitalization

on the open-source [PubPub](#) publishing platform. Volume 53 included ten Community Reports, 3,537 meeting abstracts, and 36 obituaries.

Despite the challenges facing everyone in the year, 2020 was a highly successful year for the AAS WorldWide Telescope (WWT) project. Building on the infrastructure improvements of 2019, the team rolled out major improvements across the WWT ecosystem, including [new data-processing tools](#), [a next-generation interface for JupyterLab users](#), and the final replacement of WWT's legacy backend servers, made possible by a generous contribution of developer time from Microsoft. The National Science Foundation recognized WWT's potential with a grant from the Office for Advanced Cyberinfrastructure to support the development of "tiled" FITS rendering in WWT ([OAC-2004840](#)), which will empower WWT users to explore gigapixel-class imagery (like Rubin Observatory full frames) in the "science platform" environments currently being built by several astronomical data centers. The



2020 Annual Meeting of the AAS Lead and Science Editors.

team closed out the year by partnering with the *Sky & Telescope* staff to create a web-based interactive tour of the bright stars that you can observe on New Year's Eve. [Check it out!](#)

The AAS publishing team included six full-time staff members and one contractor in 2020: Alexandra Andrews, Senior Publications Editor (Texas); Dr. Susanna Kohler, AAS Nova Editor (California); Dr. August (Gus) Muench, Data Editor (Connecticut); Dr. Greg Schwarz, Data Editor (Pennsylvania); Janice Sexton, Editorial Operations Manager (Texas); and Julie Steffen, Chief Publishing Officer (Arizona), and Lakshmi Desemsetty (contractor, Saskatchewan).

## PUBLIC POLICY

The AAS conducts a wide range of public policy activities on behalf of the membership and the astronomical sciences generally. 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 N. Bahcall Public Policy Fellow (JBPPF) closely monitor science and space policy developments important to the astronomical science community and engage with policy makers at federal agencies, in the White House, 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: At the 2020 winter AAS meeting in Honolulu, CAPP and the AAS policy staff organized two special sessions on "How Are Big Decisions in Astronomy Made?" and on "Challenges to Astronomy from Satellites".

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 it 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 over 40 posts on the AAS Policy Blog in 2020. 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 2020, the JBPPF and Public Policy Director gave eight 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 2020, the AAS provided several opportunities for Society members to learn how federal policy

Our AAS/IOP eBooks Series published 12 new titles in 2020 with 28 more forthcoming. *The Astronomical Journal* published 602 research articles in 2020; *The Astrophysical Journal* published 3,073; *The Astrophysical Journal Letters* published 724, *The Astrophysical Journal Supplement Series* published 287, and *The Planetary Science Journal* published 86, for a grand total of 4,772 research papers in 2020. There were 252 *Research Notes of the AAS* published in 2020. Apart from the *ApJ*, all journals published more articles in 2020 than in 2019.

making for science works and to lobby their elected Representatives and Senators in Washington, DC. AAS leads a Congressional Visits Day (CVD) every March; in 2020, 15 AAS members participated in CVD. However, due to COVID-19, the CVD was postponed and then made virtual. Due to COVID impacts, only eight of our volunteers were able to conduct virtual visits representing eight states. AAS and Division leadership regularly visit Capitol Hill, and the AAS policy office supported DC visits by the DPS Committee just before the start of the pandemic, but the SPD Public Policy Subcommittee visits were cancelled due to COVID-19.

AAS works to engage a large number of members for collective impact on policy via Action Alerts: Action Alerts go out via email to identify key issues in federal astronomical science 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 2020, the AAS issued two Action Alerts instructing members to "Support Research Relief" and "Take a Stand on Proposed Regulation to Limit Duration of International Student Visas". In addition to action alerts, we issued a survey of COVID impacts in Fall 2020.

Many stakeholders share interest in various elements of federally supported science and working together can help amplify our messages and increase impact. Coalitions build stakeholder consensus on issues of shared concern and jointly determine effective advocacy strategies. The AAS is a member of several multi-society 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. These include the Coalition for National Science Funding, the Task Force on American Innovation, the Energy Sciences Coalition, the Coalition for Aerospace and Science, the Physical Sciences Education Policy Coalition, the Science and Security Working Group, and 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. In 2020, the AAS was a signatory on over 20 letters to Congress or the administration via these coalitions.

The AAS co-sponsors, with the Smithsonian Astrophysical Observatory, the briefing series “Space on the Hill.” These briefings are hosted by the chair of the House Science, Space, and Technology Committee. In 2020, there were three briefings: “Parker Solar Probe” (13 February 2020), “Crowded Skies: The Impacts of Satellite Constellations on Astronomy” (11 March 2020), and “Hitting the Mother Lode: OSIRIS-REx and the Future of Space Mining” (20 October 2020).

Since the first launch of SpaceX’s Starlink satellite constellation on 23 May 2019, the AAS public policy staff have been working with the AAS Committee on Light Pollution, Radio Interference, and Space Debris on communication between the astronomical scientific community and the satellite constellation industry. At AAS 235, we had an in-person meeting with the Committee on Astronomy and Public Policy during which we discussed our strategy for addressing the impacts of satellite constellations. At AAS 235 and 236 and the 2020 Astronomical Society of the Pacific meeting there were sessions on satellite constellations. Policy staff met with the Office of Space Commerce, the Natural Resources Defense Council (NRDC), the Federal Aviation Administration (FAA), the International Development Association (IDA), the Astro2020 Subcommittee on Satellite MegaConstellations, the National Academy of Sciences Space Studies Board (SSB) and Aeronautics and Space Engineering Board (ASEB), Hill staff, the Federal Communications Commission (FCC), the Biden transition team to discuss the impacts of satellite constellations on astronomy. Policy staff had ongoing meetings with OneWeb and SpaceX. A live updates web page was created to help keep the community better informed. AAS public policy co-hosted a webinar with the Satellite Industry Association (SIA) aimed at informing the satellite industry of the impacts satellite constellations have on the astronomical sciences. The AAS and SIA teamed up again to do another 1-hour informational webinar for the satellite industry on the technical recommendations of the SATCON1 Report — a report from the SATCON1 workshop on satellite constellations co-hosted by the AAS. The SATCON1 Report



is publicly available in the *Bulletin of the AAS*, and it has served as a foundational technical report upon which further workshops and documentation have been based. AAS public policy staff advocated to get the issue of satellite constellations included in the 2021 NSF reauthorization legislation.

## EDUCATION & OUTREACH

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. General questions should be addressed to [education@ aas.org](mailto:education@ aas.org). See [aas.org/ education](https:// aas.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 MiniGrant 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. In 2020, eight proposals were received and funded. One of the eight was for a workshop or other session held at the virtual 236th AAS meeting, June 2020.

**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.

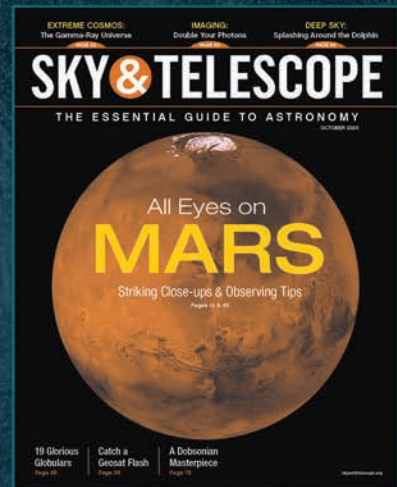
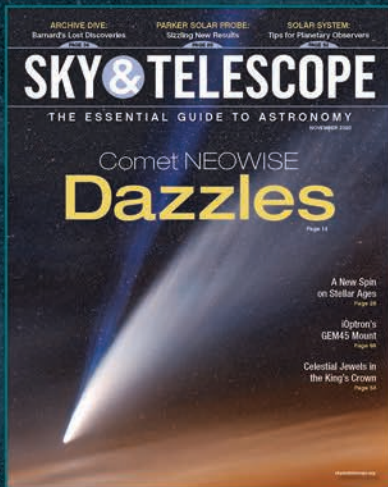
The AAS Astronomy Ambassadors Program: Launched in January 2013 — at the 221st meeting of the AAS — in Long Beach, CA, the AAS Astronomy Ambassadors program comprises a professional development workshop and a community of practice designed to help improve early-career astronomers' ability to communicate effectively with students and the public. In 2020, at the 235th meeting of the AAS, in Honolulu, HI, approximately 28 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.

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, 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.





## SKY & TELESCOPE

For *Sky & Telescope* in 2020, the coronavirus changed everything — and nothing. Our staff, along with our colleagues at AAS, went into full-time work-at-home mode starting in late March. We had to develop new processes on the fly to ensure that we didn't miss any of the myriad steps that go into producing a monthly magazine and a daily website. Just as we were getting used to that, we had to gear up for two major changes late in the summer: moving entirely onto the Cloud and relocating our offices to One Alewife Center in Cambridge, Massachusetts. As the virus continued to rage throughout the year, we canceled or postponed all *S&T* tours for 2020, including two fine eclipse tours planned for December.

Despite all these disruptions and setbacks, *S&T* continued to further its multi-part business without significant interruption — an echo of our continuous publishing through the 2019 bankruptcy of our former owner and subsequent purchase by the AAS. We are proud of having not missed a single monthly issue since *Sky & Telescope's* inception 80 years ago this November. Our website, products, and tour development also continued apace.

### The Magazine

For the first half of 2020, as at many other businesses throughout the nation, *S&T* staff were in survival mode. Though successful, the transition to working remotely, the switch from physical servers to the Cloud, and the packing and moving of our office at 90 Sherman Street in Cambridge ate up most of our energy. But by the fall, we began to look ahead, with hope for both an eventual end to the pandemic and a renewed enthusiasm for all things astronomical.

One of the biggest celestial events of 2020 helped spur this coming-back-to-life — Comet NEOWISE (C/2020 F3). Wowing Northern Hemisphere observers with its breathtaking display starting in mid-summer, the comet ended up gracing our November cover. Other 2020 covers celebrated the 30th anniversary of the Hubble Space Telescope, last year's spectacular Mars apparition, and December's

Geminid meteor shower. Last fall we also launched a new initiative centered on improving diversity, equity, and inclusion in amateur astronomy. We spelled out our hopes in a staff-written editorial in the October issue. Titled "Amateur Astronomy for All," it closed with a request for suggestions from readers. We received so many helpful responses that we devoted the entire letters section of the February 2021 issue to printing the best of them.

Eager to evolve to match the changing interests of our readership, we also spent the fall fine-tuning four new columns for the magazine. All but one debuted in the January 2021 issue (and the fourth in February). The monthly *Evenings with the Stars* focuses on constellations and individual stars — a naked-eye observing column for beginners to astronomy. *Suburban Stargazer*, offering celestial sights for those many amateurs who observe through some degree of light pollution, alternates every month with *First Exposure*, which showcases tips for beginning astrophotographers. Finally, we introduced the bimonthly *Pro-Am Conjunction*. Written by Observing Editor Diana Hannikainen, who conducted research in high-energy astrophysics as a professional astronomer for years before coming to *S&T*, it highlights fruitful collaborations between professional and amateur astronomers. Many are ongoing projects that anyone can join.

2020 also saw us return the digital version of *Sky & Telescope* to the Nxtbook platform. We did this in response to readers, who bemoaned, with the previous platform, not being able to download a PDF for their files. Tim Allen, our Advertising Sales Director, worked hard in 2020 to both keep loyal advertisers in the magazine and bring in new accounts for advertising in print and online, including Planewave Instruments, Unistellar, and Telescope Live. As we entered the new year, we began the transition to a new prepress operation using our printer, LSC Communications, and we restarted our summer editorial internship.

### Website, Products, and Tours

In February 2020, we launched our completely overhauled website. Post-redesign, [skyandtelescope.org](http://skyandtelescope.org) served more than 5 million visitors from all over the world. About 70% came from the US, Canada, and the UK, with the remaining 30% hailing from many other countries. Besides our ever-popular interactive sky chart, which shows the naked-eye sky for any place and time, our most popular pages included our coverage of Comet NEOWISE, which encouraged hundreds of thousands of people mid-pandemic to head outside and look up.

In fall 2020, we published our annual Observing Calendar for 2021 as well as *SkyWatch 2021*, our annual publication for newcomers to astronomy.

Not surprisingly, with global travel severely curtailed, *S&T* tours took the biggest hit in 2020 of any of our four main areas of business. As noted above, we had to cancel our two tours heading to South America for the 14 December 2020, total solar eclipse, for safety reasons. Four other tours were postponed. These include our Botswana stargazing safari (now running in July 2021), Iceland auroras (October 2021), Great Observatories of the American West (October 2021), and Italy Observatories (April 2022). Despite the pandemic, we continued to develop new tours for 2021 and beyond — all can be found at [skyandtelescope.org/tours](http://skyandtelescope.org/tours).

### Other Initiatives

*Sky & Telescope* participated in the AAS virtual meetings in June 2020 and January 2021. At both AAS 236 and AAS 237, two *S&T* editors reported on the plenaries and other sessions, while others staffed our virtual booth and answered questions from meeting attendees via Zoom and Slack.

In early November 2020, we held our first Editorial Advisory Committee meeting. Gathering on a quarterly basis, the committee comprises an impressive group of professional and amateur astronomers and others involved in astronomy, all of whom have generously dedicated their time and thought to helping *Sky & Telescope* further its brand and mission in the coming years. Early in 2021, we launched an in-house strategic-planning exercise that will complement the work the committee does. Results from that exercise will inform our decision-making beginning later in 2021.

Over the summer we also kicked off an initiative informally called “Astro 101.” This task force includes leading education experts and astronomy instructors as well as AAS and *S&T* staffers. Its goal is to find ways to bring *Sky & Telescope* into introductory astronomy classrooms, with the idea to have *S&T*’s curated, authoritative content supplement coursework in a compelling way for students. A very active group that meets monthly, Astro 101 plans to bring an abbreviated digital version of the monthly magazine into US undergraduate classrooms starting in the fall of 2021.

### Looking Ahead

In 2021, *Sky & Telescope* staff look forward to returning to our new offices for the first time. We moved our desks and files in at the end of August 2020, but with the pandemic still in play, we have yet to work there except sporadically and individually. With the coronavirus beginning to loosen its grip in the US (though, sadly, not in many other countries), we see our return to our handsome, natural-light-filled new offices as a symbol of renewal. We can’t think of a better place to celebrate *Sky & Telescope*’s 80th anniversary in November of 2021.

## THE AAS FELLOWS PROGRAM



The AAS Fellows Program was established by the Board of Trustees in late 2019 to honor members for extraordinary achievement and service and their contributions toward the AAS mission of enhancing and sharing humanity’s scientific understanding of the universe. AAS Fellows are recognized for original research and publication, innovative contributions to astronomical techniques or instrumentation, significant contributions to education and public outreach, and noteworthy service to astronomy and to the Society itself.

An initial group of 242 Legacy Fellows was designated by the Board and announced in early 2020 (nine of whom were added retroactively in early 2021). These include past recipients of certain awards from the AAS or its topical Divisions, distinguished AAS elected leaders and volunteer committee members, and previously unrecognized individuals with long histories of outstanding research, teaching, mentoring, and service.

In February 2021, the AAS honored another 31 members as Fellows. View the [2021 Class of AAS Fellows](#).

“It is wonderful to be able to recognize the scientific accomplishments and service to astronomy of a small group of our outstanding members each year,” says AAS President Paula Szkody (University of Washington). “Most prizes celebrate only one or two people, but the AAS Fellows program allows us to showcase the achievements of a larger number of AAS members at a wide variety of institutions and across the full spectrum of the astronomical sciences.”

## 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*, *Astronomical Journal*, and *Planetary Science 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.

The foregoing responsibilities fall to the AAS Press Officer, who organizes press conferences at AAS meetings, handles media inquiries and requests for expert referrals, writes AAS press releases, and shares headlines and links to other institutions' press releases via the @AAS\_Press Twitter account and the AAS website's Astronomy in the News page.

The year 2020 was Dr. Richard Tresch Fienberg's 12th as AAS Press Officer. Before joining the AAS staff in 2009 he spent 22 years at *Sky & Telescope* magazine, including nine as President and eight as Editor in Chief (it was Rick's idea for the AAS to acquire the magazine in 2019 after its former owner went bankrupt). Throughout 2020 Rick was assisted by AAS Media Fellow Tarini Konchady, a graduate student at Texas A&M University who worked part time for the Society, shared between Rick and the Editor of AAS Nova (see below).

In preparation for AAS meetings, the Press Officer solicits press releases; arranges press conferences, seminars for science writers, and press tours; and prepares media advisories and a press kit. During meetings, press conferences are webcast live for journalists unable to attend in person. For the meetings held virtually in 2020-2021, press conferences were held virtually as well, so all participants — both scientists and science writers — were remote. Working with the American Association for the Advancement of Science's EurekAlert 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, 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. Of course, we did not use their services at our virtual meetings.

A major change occurred in the AAS press office in late 2020: We stopped forwarding other organizations' press releases to the news media by email, as we had been doing for more than three decades. The service had become unsustainable for a variety of reasons, including competition from newer and more feature-laden commercial services and the increasing amount of time it

took as the number of astronomy-related press releases grew over the years. We still use our email list of more than 2,000 science writers worldwide to distribute our own press releases, including prize announcements and media advisories about our meetings.

The AAS press office has been working more closely with AAS Publishing since 2015 in connection with AAS Nova. Launched that year 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 2020 Rick Fienberg announced his intention to retire as of 1 September 2021, and as that date drew near, the AAS announced that Susanna Kohler would succeed him as AAS Press Officer, one of several roles she would take on as our newly minted Communications Manager.

Since 2018 the AAS has been expanding 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 one or two Astrobites items appearing on the AAS home page each week throughout the year.

The 235th AAS meeting in Honolulu, Hawai'i, in January 2020 attracted 102 press registrants. Another 30 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 eight press conferences at the winter meeting, generating huge amounts of media coverage worldwide, as well as one seminar for science writers looking ahead to the 30th anniversary of the Hubble Space Telescope. The National Radio Astronomy Observatory (NRAO) hosted a press reception at which reporters got to chat with the NRAO director and other officials about plans for the Next Generation Very Large Array. The day after the conference wrapped up, 15 intrepid press registrants flew from Oahu to Maui for a tour of the observatories atop Haleakalā, including the new Daniel K. Inouye Solar Telescope, which was then on the verge of seeing first light.

We had 115 press registrants at the virtual 236th AAS meeting in June 2020, a record number for a summer meeting and an indication of the value of virtual meetings in extending the AAS's global reach. Press attendance at AAS 237 in January 2021 topped out at 178 — by far the largest media turnout at any AAS meeting



# 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

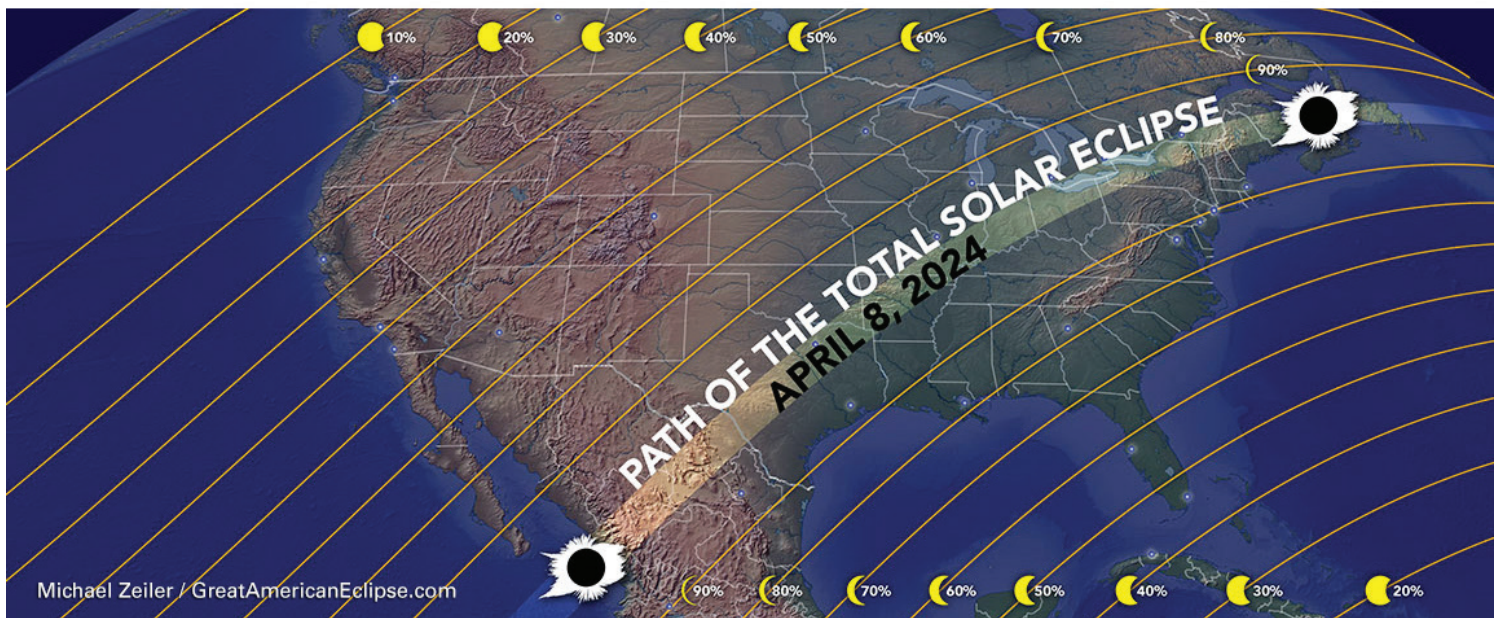
The AAS Committees help implement many of the strategic goals of the Board of Trustees, and key Committee chairs serve on the Strategic Assembly as well. A full list of Committees is available on the AAS website, but some of the most important include our diversity committees — Committee on the Status 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 others rely simply on interested individuals to volunteer for service. Each AAS honor, 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.

## AAS 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, and occasionally they “graduate” to a full-fledged Division, as outlined in our bylaws.

In 2020 the Solar Eclipse Task Force ramped up its efforts to prepare the nation for the October 2023 annular and April 2024 total solar eclipses across North America.

Throughout 2020 SpaceX continued launching batches of 60 Starlink communication satellites, which are bright enough to ruin certain types of astronomical observations. Given SpaceX’s plan to launch thousands more such satellites, the AAS public policy team and Committee on Light Pollution, Radio Interference, and Space Debris (LPRISD) reached out to SpaceX to begin a dialog about mitigating their negative effects on ground-based astronomy. SpaceX has been quite responsive to our concerns and has taken steps to reduce the satellites’ reflectivity. The dialog is continuing under the auspices of the LPRISD Committee’s Ad Hoc Subcommittee on Satellite Constellations, which is collaborating with concerned counterparts at the International Astronomical Union and other astronomical organizations. The AAS and NSF’s NOIRLab co-organized a Satellite Constellations 1 (SATCON1) virtual workshop in the summer of 2020 that brought together more than 250 scientists, engineers, satellite operators, and other stakeholders. In addition to quantifying the scientific impacts of huge ensembles of low-Earth-orbiting satellites, they came up with a variety of technical and policy recommendations to minimize those impacts. Another workshop, SATCON2, was scheduled for mid-2021.



## 2020 FINANCIAL REPORT

As of 31 December 2020, the AAS's net assets were \$14,783,356, an increase of \$518,216 from 2019. This is largely attributed to investment income and journals activity.

The *ApJ* family and *AJ* produced respective surpluses of \$375,819 and \$44,473, while the *PSJ* produced a deficit of \$80,157. These results are due to collection of subscriptions, amount of published content, and reduced costs.

The market value of our portfolio increased by \$1,878,181. The journal development expenses reached \$85,615. In 2020, we spent \$239,791 towards strategic initiatives. Additionally, we incurred \$58,398 in legal and consulting fees associated with harassment and ethics issues in 2020.

AAS journals authors paid \$719,182 in Gold Open Access (GOA) fees in 2020, up from \$175,509 in 2017. The GOA fee is set higher than the base fee per digital quantum at a level that would cover lost subscription revenue if all authors selected (or were required to select) GOA and assumes no subsidy from the journal reserve funds.

Additionally, our partnership with IOP Publishing and inclusion into the larger subscription bundle (IOPsx) netted royalty revenue in the amount of \$159,094; up from \$38,293 in 2017. In 2020, 64% of our *AJ* and *ApJ* institutional subscribers purchased our content through the IOPsx package. Participating in the IOPsx package is one way to insulate the AAS journals from single subscription cancellations.

In July of 2019, we created AAS Sky Publishing, LLC as a wholly owned subsidiary of the AAS. Though this subsidiary, we purchased *Sky and Telescope* business lines from F+W Media through a bankruptcy sale. At the time of the purchase, we also assumed the fulfillment of subscriptions paid to F+W for future years. F+W sold subscriptions through 2025. Since the entire subscription revenue was not collected by the AAS and two tours were cancelled due to the pandemic, we experienced a loss of \$1,247,456. We do anticipate losses in the first few years as we build the content through an editorial advisory board and increase the subscription base. We will be presenting a five-year financial plan for the *S&T* business lines in 2021.

In an attempt to diversify the revenue streams of the Society, we created AstronomyCom, Inc. (ACI), a wholly owned for-profit subsidiary of the AAS. This for-profit corporation is used to fund partnerships/programs that are not considered to be tax-exempt by the IRS but are closely related to our mission. Our eBooks partnership with IOP Publishing, our journals publisher, is accounted for in ACI. Due to the pandemic in 2020, the revenue to ACI was \$25,724, down from \$162,972 in 2019. The eBooks program and the speaker ready service was not utilized at the same level as 2019.

In 2020, the AAS financially supported members through many different programs to facilitate attendance at scientific meetings:

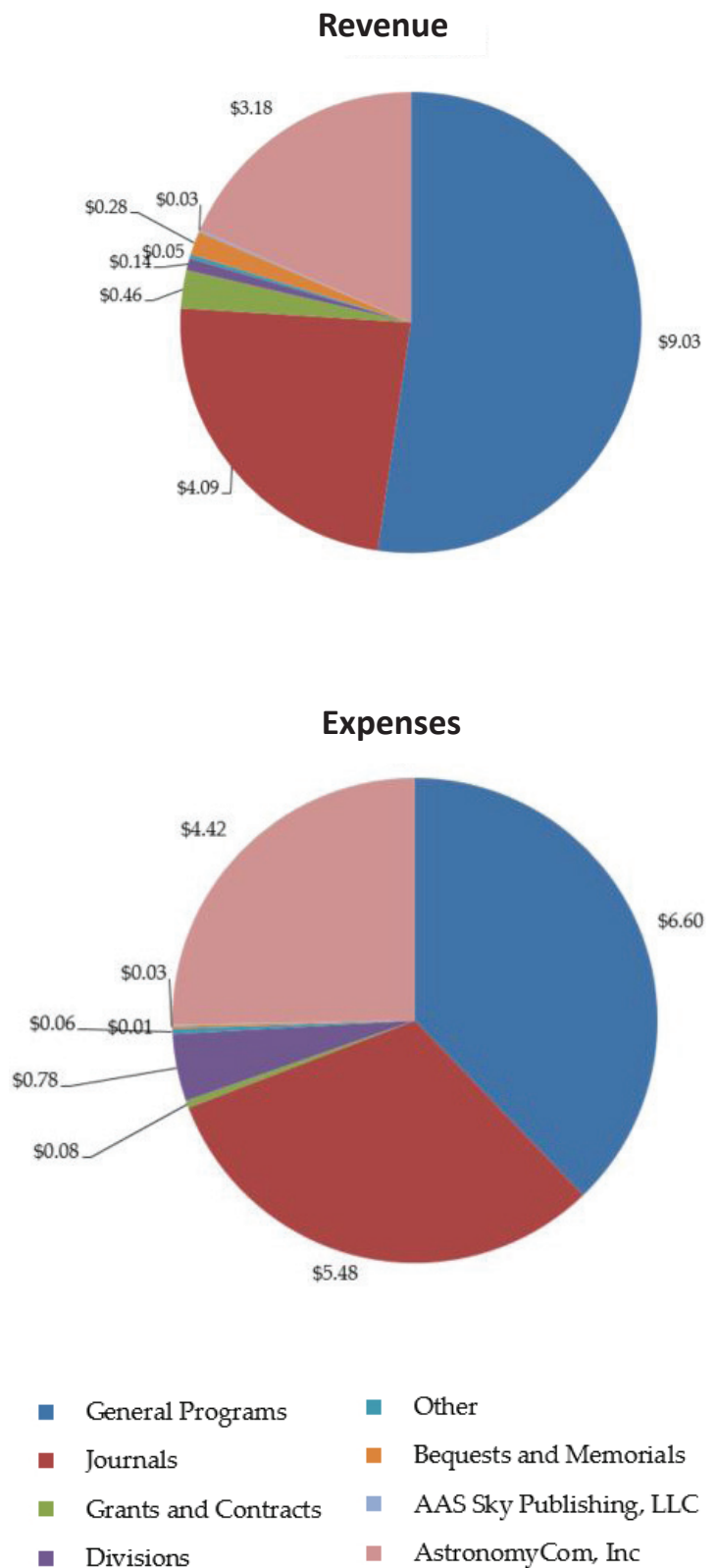
- Through the AAS FAMOUS (Funds for Astronomical Meetings: Outreach to Underrepresented Scientists) Grant Program, we provided travel grants totaling \$31,500 to 42 individuals. Priority is given to members of historically underrepresented groups, such as scientists at small colleges, minorities, non-traditional students, and veterans, among others.
- Twenty-one student travel grants were awarded in the amount of \$8,125 to attend AAS and Division meetings in 2020. In comparison, we issued travel grants in the amount of \$35,459 in 2019. This decrease is due to the travel bans associated with the pandemic.
- In 2020, the AAS awarded 29 childcare/dependent care grants in the amount of \$10,150. Additionally, we subsidized the on-site childcare program in the amount of \$9,116.
- In 2020, six members received Education Mini-Grants in the amount of \$7,413. This amount was below the budget of \$25,000 due to the travel bans in 2020.
- The AAS and Divisions issued 23 prize awards in the amount of \$35,950 in 2020.
- The International Travel Grant Program was suspended in 2020 due to the travel ban.

Figure 1. AAS Balance Sheet

Assets	2020	2019
Cash and Cash Equivalents	840,192	669,967
Accounts Receivable	926,389	888,709
Inventory	98,981	117,357
Prepaid Expenses	614,722	948,810
Investments	14,185,207	14,472,847
Deposits	112,233	112,233
Assets Held for Deferred Compensation	408,548	235,519
Goodwill, net	3,136,176	4,032,226
Property and Equipment	1,132,877	1,019,260
Tenant Improvement Assets		
<b>Totals Assets</b>	<b>\$21,455,325</b>	<b>\$22,496,928</b>
<b>Liabilities and Net Assets</b>		
Accounts Payable and Accrued Expenses	907,933	1,352,760
Deferred Revenue	4,443,610	5,934,948
Deferred Rent	911,878	708,561
Deferred Compensation	408,548	235,519
<b>Total Liabilities</b>	<b>\$6,671,969</b>	<b>\$8,231,788</b>
<b>Net Assets</b>		
Without Donor Restrictions	10,676,931	10,892,166
With Donor Restrictions	4,106,425	3,372,974
<b>Total Net Assets</b>	<b>\$14,783,356</b>	<b>\$14,265,140</b>
<b>Total Liabilities and Net Assets</b>	<b>\$21,455,325</b>	<b>\$22,496,928</b>

Figure 2. AAS Statement of Activities		
Unrestricted Activities	2020	2019
<b>Revenues</b>		
Journals	9,015,140	8,493,822
General Programs	4,076,278	4,246,475
Divisions	459,911	582,291
Other	144,352	605,708
Grants and Contracts	50,628	211,097
Bequests and Memorials	283,098	133,279
AstronomyCom, Inc	25,724	162,972
AAS Sky Publishing, LLC	3,169,452	1,806,627
Net Assets Released from Restrictions	31,489	87,232
<b>Total Unrestricted Income</b>	<b>\$17,256,072</b>	<b>\$16,329,503</b>
<b>Expenses</b>		
General Programs	6,603,446	6,311,841
Journals	5,475,900	5,545,785
Divisions	84,517	334,528
Other	783,799	669,799
Grants and Contracts	62,873	211,097
Bequests and Memorials	31,113	64,359
AstronomyCom, Inc	12,751	4,260
AAS Sky Publishing, LLC	4,416,908	2,596,290
<b>Total Expenses</b>	<b>\$17,471,307</b>	<b>\$15,737,959</b>
<b>Change in Unrestricted Net Assets</b>	<b>(\$215,235)</b>	<b>\$591,544</b>
<b>Temporary Restricted Net Assets</b>		
Bequests and Memorials	192,317	272,542
Contributions and Other	402,517	250,351
Divisions	170,106	119,936
Net Assets Released from Restrictions	(31,489)	(87,232)
<b>Change in Temporarily Restricted Net Assets</b>	<b>\$733,451</b>	<b>\$555,597</b>
<b>Change in Net Assets</b>	<b>\$518,216</b>	<b>\$1,147,141</b>
<b>Net Assets Beginning of Year</b>	<b>14,265,140</b>	<b>13,117,999</b>
<b>Net Assets End of Year</b>	<b>\$14,783,356</b>	<b>\$14,265,140</b>

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



## 2020 PRIZEWINNERS



1. **Caroline Morley - Annie Jump Cannon Award:** For her innovative work on modeling the atmospheres of exoplanets and brown dwarfs. 2. **Dennis Conti - Chambliss Amateur Achievement Award:** For his outstanding observational, computational, and educational contributions to exoplanet studies. 3. **Thomas Burbine - Chambliss Astronomical Writing Award:** For his undergraduate textbook “Asteroids: Astronomical and Geological Bodies” (Cambridge University Press, 2017). 4. **Christopher Kochanek - Dannie Heineman Prize:** For combining observations and theory to make outstanding contributions to astrophysics in topics ranging from the use of gravitational lenses for studies of dark matter halos and quasar accretion disks.



5. **Smadar Naoz - Helen B. Warner Prize:** For her many contributions to theoretical astrophysics, especially her influential and creative studies in cosmology and dynamics. 6. **Scott Tremaine - Henry Norris Russell Lectureship:** For his lifelong contributions to our understanding of the dynamics of natural cosmic systems on scales ranging from comets to clusters of galaxies, and for his mentoring of junior colleagues and leadership of major astronomical research institutions. 7. **Oswald “Ossy” Siegmund - Joseph Weber Award for Astronomical Instrumentation:** For his significant and innovative contributions to the technology of photon counting detectors and the impact these instruments have had on advancing our understanding of the universe. 8. **Emily Levesque - Newton Lacy Pierce Prize in Astronomy:** For her breakthrough studies of massive stars and their explosive end states.



9. **Krzysztof Stanek & Christopher Kochanek (see #4) - Beatrice M. Tinsley Prize:** For their innovative contributions to time-domain astronomy and, in particular, their leadership in the All-Sky Automated Survey for Supernovae (ASAS-SN). 10. **Deborah Byrd - Education Prize:** For her contributions to the Texas Star Party, StarDate, and Earth & Sky, which epitomize her advocacy for science and her lifetime of service in educating and inspiring the public with the wonders and beauty of astronomy. 11. **Roc Cutri - George Van Biesbroeck Prize:** For his long-standing and selfless service and support for ground- and space-based infrared astronomy, including his leadership, development, and management of public data products.

# 2020 AAS DONORS

## **SINGULARITY: \$5,000+**

Arnold M. Heiser  
Henry G. Roe

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

M. Marsha Allen  
Edward Anders  
Eric E. Becklin  
Edward K. Conklin  
Jo Ann Eder  
Peter A. Gilman  
Steve B. Howell  
Esther M. Hu  
Arlo U. Landolt & Eunice  
Landolt  
Alice K. B. Monet  
Curt S. Niebur, PhD  
*In memory of Susan Niebur*  
Jeremiah P. Ostriker  
Terry D. Oswalt  
John Peoples, Jr.  
Lawrence W. Ramsey  
Frederic A. Rasio  
Daniel Wolf Savin  
Andrew Wilkin Seacord Living  
Trust  
Bruce A. Twarog  
William C. Wells  
Lee Anne M. Willson

## **SUPERNOVA: \$500-\$999**

Thomas R. Ayres  
David H. DeVorkin  
Reginald J. Dufour  
Martin Harwit  
Tess Jaffe  
Richard G. Kron  
Stephen P. Maran  
Kevin B. Marvel  
Angela M. McGrath  
*In memory of Mindy  
Louise Jones*  
Joseph E. Pesce  
Randall K. Smith  
George Sonneborn  
Sumner Starrfield  
Robert E. Taylor, M.D.  
Robert E. Wilson  
Robert F. Wing

## **NOVA: \$250-\$499**

Adrienne Allen  
Jennifer L. Bartlett

George Fritz Benedict  
Jeffrey Bennett  
Spencer L. Buckner  
Donald R. Davis  
William Van Dyke Dixon  
R. Paul Drake  
David W. Dunham  
Bruce Elmegreen  
Debra M. Elmegreen  
Larry W. Esposito  
James Nathan Fry  
Margaret M. Hanson  
Richard J. Harms  
Deidre Ann Hunter  
Kenneth J. Johnston  
Frederick K. Lamb  
Carol LePage  
Felix J. Lockman  
Stephen J. Mackwell  
Stephan R. McCandliss  
Neil A. McGee  
Robert W. O'Connell  
Jane R. Rigby  
Farid Salama  
S. Christian Simonson, III  
Chris Sneden  
Michael A. Strauss  
R. Brent Tully  
*In honor of Beatrice Tinsely*  
Dale Turner  
Thomas R. Williams  
Beverley J. Wills

## **SUPERGIANT: \$100-\$249**

Anonymous (2)  
Thomas B. Ake, III  
Marc S. Allen  
Phil Arras  
James F. Bell, III  
Rahul Bendre  
Diana L. Blaney  
Robert J. Boyle  
Hale Van Dorn Bradt  
Joel N. Bregman  
William T. Bridgman  
John I. Castor  
Nancy J. Chanover  
Edward B. Churchwell  
Barry G. Clark  
Brenda G. Corbin  
Thomas E. Corbin  
Patrick Crane  
Ingrid Daubar  
Edward J. Devinney, Jr.  
Megan Donahue  
Judy R. Dubno

Sandra M. Faber  
Steven Robert Federman  
Henry Closson Ferguson  
Adam Robert Foster  
Dale E. Gary  
John E. Gaustad  
Jonathan M. Gelbord  
Timothy Glotch  
Candace L. Gray  
Richard F. Green  
Donald E. Groom  
Edward J. Groth, III  
Amanda Hendrix  
*In honor of Claudia  
Alexander*  
James E. Hesser  
*In honor of Kurt Dressler*  
Alan W. Hirshfeld  
David E. Hogg  
Roberta M. Humphreys  
Kazunori Ishibashi  
Jon Michael Jenkins  
David C. Jenner  
Harrison P. Jones  
Richard R. Joyce  
Stephen W. Kahler  
Stephen L. Keil  
John G. Kirk  
Patricia Knezek  
Kathleen E. Kraemer  
James M. Lattis  
Martha A. Leake  
Tim Lister  
James MacDonald  
Renu Malhotra  
Michael E. Marotta  
Morgan May  
Harold A. McAlister  
Dan McCammon  
Christopher F. McKee  
Jacqueline A. Monkiewicz  
Beatrice E. A. Mueller  
Kenneth M. Nollett  
Dara J. Norman  
Glenn S. Orton  
Wayne Osborn  
Elizabeth M. Palmer  
Robert T. Pappalardo  
Daryl Parker  
Eugene N. Parker  
Georg G. Raffelt  
Julie A. Rathbun  
Trina L. Ray  
John C. Raymond  
Richard F. Rees, Jr.  
Matthew Richter  
George Robinson

David B. Sanders  
Nathan E. Sanders  
Didier Saumon  
Rebecca Schindhelm  
Daniel A. Schwartz  
Jennifer E. C. Scully  
Kelsi N. Singer  
Andrew P. Skumanich  
J. Allyn Smith  
Harold Spinka  
Phillip C. Stancil  
William C. Straka  
Curtis Struck  
Woodruff T. Sullivan, III  
Paula Szkody  
Joseph S. Tenn  
Doris Rosenbaum Teplitz  
John R. Thorstensen  
*In honor of George R. Lake*  
Alan T. Tokunaga  
John R. Troy  
Michael S. Turner  
Richard Wagener  
Robert Craig Walker  
Rene A.M. Walterbos  
Alycia J. Weinberger  
Kay Weiss  
Paul J. Wiita  
Steven P. Willner  
Adolf N. Witt  
Chao Yuan Yang  
Donald K. Yeomans

## **GIANT: UP TO \$99**

Anonymous (1)  
Elisabeth R. Adams  
Katherine A. Alatalo  
Louis John Allamandola  
Kevin H. Baines  
Paul E. Barrett  
Jarius Bates  
Tracy Michelle Becker  
Edgar A. Bering, III  
Gordon Bjoraker  
Boncho P. Bonev  
William J. Borucki  
Richard N. Boyd  
Melissa Brucker  
James Brunkella  
L. Suzanne Casement  
Benjamin Cassese  
Thomas Chamberlain  
Bella C. Chiu  
Hong-Yee Chiu  
Helen E. Coffey

Debra Matell Cohen <i>In memory of Helen Glagola</i>	Stanley S. Hansen Dieter Hartmann Saeko S. Hayashi Bryan J. Holler Ellen S. Howell Brian K. Jackson Eric B. Jensen Beth Johnson David Geoffrey Johnson Susan E. Kayser Michael S. W. Keesey Alice Orthlieb Kellepourey Thomas Kelsall Wolfgang Eitel Kerzendorf Jeremy R. King Frederick W. Kleinhans Tomas Kohout Arieh Konigl Yoshio Kubo Steven H. Langer Alan M. Levine Donald H. Liebenberg Sean S. Lindsay Marvin M. Litvak Timothy A. Livengood Andrew MacKay	Franck Marchis Joseph R. Masiero Christopher W. Mauche Stephen C. McCluskey Ashley Thomas McDermott Lucy-Ann A. McFadden David L. Meier Kate Meredith Kelly E. Miller Jim Murphy Robert M. Nelson Claire E. Newman Philip D. Nicholson Richard Ottolini Michael Patti Katherine Rabidoux Paul B. Reid Matthias D. Rempel Kurt D. Retherford Edgard G. Rivera-Valentin Andrew S. Rivkin Louis A. Rose Marc Rothenberg Kenneth S. Rumstay Jane L. Russell Malcolm P. Savedoff	Charles Alfred Schambeau Francois Schweizer Susan M. Simkin Tamikka Sims George Sjoberg Albert T. Smith, Jr. Sarah M. Sonnett John R. Spencer Philip A. Stahl William L. Stein S. Alan Stern Jean Hebb Swank John R. Thomas Matthew S. Tiscareno Elizabeth P. Turtle Steven Vance Steven R. Wilkinson James G. Williams Ralph Winrich Michael H. Wong Rosemary F. G. Wyse Padma A. Yanamandra-Fisher <i>In tribute to Dr. Edgar Everhart</i>
---	---	--	--

## 2020 INSTITUTIONAL SPONSORS

University of Alabama, Tuscaloosa American Institute of Physics (AIP) Arizona State University University of Arizona Associated Universities, Inc. AURA Ball Aerospace & Technologies Corp. Brigham Young University, Provo University of California at Berkeley University of California at Riverside California Institute of Technology University of California, Los Angeles University of California, Santa Cruz Center for Astrophysics   Harvard & Smithsonian University of Chicago, Illinois Columbia University Cornell University Dartmouth College DFM Engineering, Inc. Diffraction Limited / SBIG University of Florida, Gainesville George Washington University Georgia State University Harvard University University of Hawaii	Hawaii Aerospace Corporation Indiana University, Bloomington Iowa State University Johns Hopkins University L3Harris Lowell Observatory Maria Mitchell Observatory University of Maryland, College Park University of Massachusetts, Amherst Massachusetts Institute of Technology University of Michigan, Ann Arbor Michigan State University University of Minnesota, Twin Cities University of Missouri, Columbia Montana State University NANOGrav National Radio Astronomy Observatory (NRAO) National Science Foundation New Mexico State University New Mexico Tech University of New Mexico Northrop Grumman Northwestern University Pennsylvania State University PlaneWave Instruments	Princeton University QHYCCD Rochester Institute of Technology Royal Society Publishing Rutgers University, Camden San Diego State University Smithsonian Astrophysical Observatory University of South Carolina STARtorialist Teledyne Imaging Sensors Texas A&M University, College Station Texas Christian University University of Texas, Austin University of Texas, San Antonio UC Berkeley SETI Research Center Universities Space Research Association (USRA) The US Extremely Large Telescope Program University of Utah University of Virginia University of Washington, Seattle West Virginia University University of Wisconsin, Madison University of Wisconsin, Milwaukee University of Wyoming Yale University
--	---	---

## IN MEMORIAM

The Society was saddened during 2020 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 *Bulletin of the AAS* website at <https://baas.aas.org/obituaries>.

Babar Ali  
Nadine G. Barlow  
Jacques M. Beckers  
A. Boggess  
Charles Thomas Bolton  
C. Stuart Bowyer  
George R. Carruthers  
John I. Castor  
Robert D. Chapman  
Upendra D. Desai  
Reginald J. Dufour  
Ruth S. Freitag

Roger H. Hildebrand  
Thomas M. Jordan  
William Liller  
Jean-Pierre R. Macquart  
H. Jay Melosh  
Michael I. Mishchenko  
Rafael Navarro-Gonzalez  
Anastasios Nesis  
Edward C. Olson  
Roger Phillips  
Malcolm P. Savedoff  
Richard A. Schwartz

Paul D. Shankland  
Susan M. Simkin  
Victor J. Slabinski  
John R. Stauffer  
João E. Steiner  
Paul Tebbe  
Roy A. Tucker  
Peter O. Vandervoort  
William B. Wetherell  
Oran R. White

## 2020 BOARD OF TRUSTEES

*As of 15 June 2020*

### Officers

President: Paula Szkody, Univ. of Washington, Seattle  
Past President: Megan Donahue, Michigan State Univ.  
Senior Vice-President: Joan Schmelz, USRA  
Second Vice-President: Geoffrey C. Clayton, Louisiana State Univ., Baton Rouge (On leave of absence, Jun 2020 – Jun 2021)  
Third Vice-President: Stephen Unwin, Jet Propulsion Lab/ Caltech  
Treasurer: Doris Daou, NASA Planetary Science Division  
Secretary: Alice K. B. Monet, US Naval Observatory (retired)  
Executive Officer: Kevin B. Marvel

### At-Large Trustees

Marcel Agüeros, Columbia University  
Kelsey Johnson, University of Virginia  
Tereasa Brainerd, Boston University  
Hannah Jang-Condell, University of Wyoming  
Edmund Bertschinger, Massachusetts Institute of Technology

## 2020 AAS STAFF

### Executive Office Staff

Kevin B. Marvel, Executive Officer  
Alexandra Aguilera, Senior Publications Editor  
Sara Asfaw, Staff Accountant & Grants Contact  
Rita Braxton, Senior Meetings Manager  
Butler Burton, Associate Editor, AAS Journals  
Sherrie Brown, Science Program Administrator  
Kelly E. Clark, Chief Financial & Operating Officer  
Michelle Farmer, Governance & Operations Administrator  
Rick Fienberg, Press Officer  
Diane Friendak, Director of Membership Services  
Susanna Kohler, Editor, AAS Nova  
Debbie Kovalsky, Director of Exhibits and Development  
Kelsie Krafton, John Bahcall Public Policy Fellow  
Hua Liu, Director of Communications & Marketing  
Stephen P. Maran, Senior Advisor to the Executive Officer  
Gus Muench, Journals Data Scientist  
Joel Parriott, Deputy Executive Officer & Director of Public Policy  
YaShica Robinson, Financial Coordinator & Membership Assistant  
Greg Schwarz, Journals Data Specialist  
Elizabeth Scuderi, Director of Meeting Services  
Kidist Shiferaw, Financial Analyst  
Janice Sexton, Editorial Operations Manager  
Julie Steffen, Director of Publishing  
Crystal Tinch, Communications & Engagement Coordinator  
Ethan Vishniac, Editor in Chief, AAS Journals  
Peter Williams, Director & Innovation Scientist

