APS Sharpens Focus on Ethical Conduct in Physics

BY DAVID BARNSTONE

The APS Council adopted comprehensive guidelines for scientific integrity and professional conduct in April 2019. But for much of its history, physics had no formal standards of ethical behavior.

“Prior to about 1991, the APS didn’t have any particular statements about ethics,” said Frances Houle, Chair of the APS Ethics Committee, who provided an overview of the committee’s work at the 2021 Annual Leadership Meeting on February 5. “I think it was just assumed everybody would hold themselves to very high standards.”

That assumption was challenged by two separate, “completely shocking” instances of data fabrication in 2002 by scientists at Bell Labs and Lawrence Berkeley National Laboratory. In response, Houle convened a Task Force on Ethics with former APS CEO Kate Houle, who really began to understand that treatment of subordinates and the formation of a new task force in 2005 focused on incorporating ethics education into physics curricula.

For the next decade, the Society’s work on ethics remained relatively quiet. The APS Panel on Public Affairs (PPA) issued a handful of statements. Then, in 2016, the American Geophysical Union published a draft of their ethics guidelines.

“The first time, treatment of people, especially harassment, was elevated to the level of scientific misconduct held by fabrication, fraud, or plagiarism,” Houle said.

Plasma physicist Erol Oktay knows the importance of collaboration. Now retired, Oktay was for many years involved in one of the world’s most complex and collaborative endeavors—the International Thermonuclear Experimental Reactor (ITER) being built in France to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our Sun and stars. And as a member of the APS Legacy Circle, he values the way physicists can come together to support their professional society through the APS planned giving programs.

“I’ve been a member of APS for over 50 years,” says Oktay. “I decided I should go ahead and support the field of plasma physics and fusion. I started talking to people in the community and decided that the best way would be through APS and the Division of Plasma Physics.”

“I THINK THAT THE PHYSICS COMMUNITY SHOULD BE MORE AWARE OF THE APS LEGACY CIRCLE AND THAT THERE ARE QUITE A LOT OF PEOPLE WHO CAN MAKE THIS KIND OF CONTRIBUTION.”

Erol Oktay

Oktay received his PhD degree from the University of Michigan in 1969 with a thesis on how lasers interact with laboratory plasmas. After five years of research at Massachusetts Institute of Technology and the University of Maryland, he joined the US Department of Energy (which was then called the Atomic Energy Commission) and worked in the Controlled Thermonuclear Fusion Division until his retirement in 2011.

“My activities in this group involved program management with responsibilities of oversight for fusion programs at Los Alamos National Laboratory, the Princeton Plasma Physics Lab, Oak Ridge National Lab, and General Atomics.
April 6, 1938: Discovery of Teflon

Teflon is in history of silane-discovery that can profoundly impact our daily lives. That includes the discovery of a novel polymer, later trademarked as Teflon, by an American scientist named Roy J. Plunkett.

Born in Ohio in 1910, Plunkett grew up in poverty and attended Manchester College in Indiana, where his roommate was future Nobel laureate Paul Flory (honored for his contributions to the theory of polymers).

Plunkett went on to earn his PhD from Ohio State University. His thesis was on the mechanism of carbohydrate oxidation. In 1936, after receiving his doctorate, he joined E.I. du Pont de Nemours and Company (now known as DuPont) as a research scientist, where he worked for the rest of his career.

Plunkett’s early research at DuPont's Jackson Laboratory in New Jersey involved developing new chlorofluorocarbon refrigerants—probably something non-toxic and non-flammable to replace less-desirable refrigerants like sulfur dioxide and ammonia. He was experimenting with tetrafluoroethylene (TFE) gas, stored in 1 kg cansisters at temperatures conducive to dry ice until they were ready to be chlorinated for the experiments.

On the morning of April 6, 1938, Plunkett asked his research assistant, Jack Rebok, to set up their experimental apparatus with one of the TFE cylinders used by the day before. Typically, when a canister’s valve was opened, the gas would flow out under its own pressure. But this time, nothing happened. Yet the weight of the canister had not changed. Realizing that there simply was no gas left in the cylinder, a puzzled Plunkett tipped it upside down, and a white-ish powder fell onto the lab bench.

“We scraped around with (a) wire inside the cylinder...to get some more of the powder,” he later recalled. “What I got out that way certainly didn’t add up, so I knew there must be more inside.” Eventually the two men decided to cut open the cylinder and found even more of the powder packed into the bottom and lower sides.

DuPont often told audiences that the idea for Teflon was accidental. "He recognized almost at once that the material was different and that it had potential," Plunkett’s wife, Lois, told The New York Times in 1994.

It fell to other chemists and engineers to find a good use for PTFE, which was initially extremely expensive to produce and could not easily be shaped. The first application was on the Manhattan Project, where its corrosion resistance properties proved useful as a coating on valves and seals in the pipes holding highly reactive uranium hexafluoride at the uranium enrichment plant in Oak Ridge, Tennessee.

The Teflon trademark was registered in 1945 by Kinetic Chemicals, a DuPont partnership with General Motors, and was soon produced more than two million pounds of the branded PTFE each year. By the 1950s, scientists had invented other polymers that kept most of the desirable chemical and mechanical properties of PTFE, yet were more easily molded or extruded, thereby opening up more practical applications. All this, in a field that had been considered mature and relatively uninteresting scientifically.

In 1954, French engineer Marc Girgoire invented the first PTFE-coated nonstick cooking pans (brand name: Tefal) at the suggestion of his wife. The first nonstick cookware appeared in the US in 1961, introduced by Marion A. Troughto, who had noted its usefulness for his scientific tools. Hundreds of manufacturers all over the world now offer some version of nonstick cookware.

Today, Teflon is used in a wide range of industrial applications: in windshield wipers; in a stack of delrin in carpets, furniture and clothing; in lightbulbs; in glass coatings; and

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CHEMICAL SOCIETY ON PAGE 1

The Oktays are members of the APS Legacy Circle, which recognizes donors who support the APS mission through this kind of planned giving. By including APS in their estate plans, the members create an enduring legacy that will benefit physicists and their families, educators, students, and the general public.

Oktay would like to see more people in the Legacy Circle. “We also contribute to the Baltimore Symphony Orchestra, and they have a Legacy Circle that is quite big,” he says. “I think that the physics community should be more aware of the APS Legacy Circle and that there are quite a lot of people who can make this kind of contribution.”

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GOVERNMENT AFFAIRS

APS Members Advocate for Key Science Policy Issues During First-Ever Virtual CVD

T he 2021 APS Congressional Visits Day (CVD) was one for the Society’s record books, as the first virtual CVD was held with more than 60 APS members from around the country participating—including some currently living abroad—in more than 80 congressional meetings. Members’ accounts, their experiences were both positive and productive.

To prepare for this year’s unique, all-virtual, two-day event, the APS Office of Government Affairs (OGA) staff made several key adjustments designed to help APS members have the most effective meetings possible. For example, OGA OGA staff worked with APS Communications staff to develop a new workbook containing one-page summaries of APS’s science policy priorities, which was accessible by congressional staff. They also set up a virtual lounge that allowed APS members to communicate with one another between meetings and ask questions and provide real-time feedback to APS OGA staff.

During their meetings, volunteers advocated for six science policy priorities, which were determined with input from APS members and leaders. They asked Congress to: include at least $16 billion in relief funding in the next COVID-19 relief bill for key federal science agencies; prioritize robust funding increases for those science agencies; bolster research capacity at emerging research institutions to broaden STEM participation; overturn a recent EPA rule that eliminated particular methane emissions regulations; and support the following bills: “Stimulus for Science Act,” the “Keep STEM Talent Act,” and the “Combating Sexual Harassment in STEM Act.”

“The organization of the virtual CVD was seamless. I was not as impressed with how clearly the team laid out where I had to be, how to prepare, and where to go,” said Laura Rios, Assistant Professor of Physics at California Polytechnic State University. “The hard work that was put in, particularly in creating the one-pagers to share with our congressional representatives, will make future in-person meetings that much more impactful.”

Andrea Liu, Nephron Professor of Physics at the University of Pennsylvania and former Speaker of the APS Council, described a similar positive experience during the virtual CVD.

“I thought the virtual visits went very well. The first staffer we spoke with was Jay Mathews (California Institute of Technology) started the session with a brief presentation that introduced some of the barriers to communicating science to nonscientists, especially skeptics. Thorne then participated in a panel discussion, moderated by World Science Fair Co-founder Brian Greene (Columbia University). Other panelists included prominent science communicators, and Callin O’Connor, UC Irvine philosopher of science, expert on science communication, and author of The Misinformation Age: How False Beliefs Spread.

According to Thorne, the ongoing COVID-19 pandemic and the Trump presidency highlighted problems in America that must be addressed: widespread confusion about, mistrust of, and resistance to science. Rebuilding trust in science, in particular skeptical adults, requires the contribution of all scientists making an effort to connect with non-scientists. Thorne says that for scientists to be effective communicators, they must “eschew arrogance” and create messages about science that can inspire, while conveying how science works. For communities that are particularly resistant to the messages of science, Thorne emphasized the importance of connecting with people on a personal and local level, recruiting well-liked public figures who aren’t scientists to discuss an issue, and focusing on solutions, rather than fear, on topics like climate change.

To lock off the discussion portion of the session, Greene asked the panelists to reflect on how to communicate about uncertainty in science. Thorne recommended discussing the best knowledge we have about, speaking to the audience in their language about what concerns them. At the Alda Institute, he says they often have scientists experiment with improvisation to learn how to quickly establish connections with another person and learn what they care about. Once the connection is made, the next step is to build a message that specifically fits that audience. The panel discussion also touched on themes such as the role of scientists in society and in a democracy, the necessity of improved science communication education in college curricula, and how to make a field like physics more relevant in people’s everyday lives. At the same time, the panel suggested that a key to communicating about physics isn’t only its everyday uses, but its potential to present the mystery and beauty of science and inspiring wonder.

The full recording of this session is available online at www.youtube.com/watch?v=NIwmmBVFtio.

Andrea Liu
Jay Mathews
Laura Rios

ADVOCATE CONTINUED ON PAGE 7

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April 2021 - 3

ANNUAL LEADERSHIP MEETING

Science Communicators Discuss Rebuilding Trust in Science

by LeaH PoffenBerGer

From February 4 to 6, the 2021 APS Annual Leadership Meeting brought together a number of prominent leaders in science to address issues facing the physics community. A session on February 6, titled “Communicating Science to Nonscientists in Post-Election and Post-Pandemic America,” gathered panelists at the forefront of science communication to discuss the growing challenge of communicating science in an increasingly polarized society.

Nobel laureate Kip Thorne (California Institute of Technology) started the session with a brief presentation that introduced some of the barriers to communicating science to nonscientists, especially skeptics. Thorne then participated in a panel discussion, moderated by World Science Fair Co-founder Brian Greene (Columbia University). Other panelists included prominent science communicators, and Callin O’Connor, UC Irvine philosopher of science, expert on science communication, and author of The Misinformation Age: How False Beliefs Spread.
at 12:00 PM will cover the APS Innovation Fund, a program that provides funding to advance collaborative projects that support the APS mission. Physics faculty may also be interested in the 2:00 PM session titled “Managing Threats to Your Department: Building a Thriving Physics Program” that will provide information on the Effective Practices for Physics Programs (EP3) Guide and Toolkit for Departments Under Threat.

Saturday morning at 8:30 AM, April attendees will have a chance to hear from the newest Nobel laureates in Physics at the Kavli Foundation Plenary. Brian Nord, and Penrose will speak on the various aspects of black hole research for which they shared the Nobel Prize. At 10:45 AM, the first of the scientific sessions start, with 21 parallel tracks. Meeting attendees also have a chance at 12:00 PM to learn from Physical Review editors about serving as a referee for the Physical Review journals. At 12:40 PM, the APS Division of Particle Physics will host their annual Grad Slam, showcasing grad student research with lightning talks.

Sunday, April 18, will include many more opportunities to hear the latest in research, from the continuing search for dark matter to applications of quantum computing. A special student-only session, “Physics Crossing: Virtual Tours and Career Workshop,” at 10:30 AM, will allow students into preparing for non-academic careers. The final day of the conference will feature another plenary session, starting at 8:30 AM, titled “Advancing an Inclusive Community,” with speakers Geraldine Cochran (Rutgers University, New Brunswick), Brian Nord (Fermilab, University of Chicago), and Dana Norman (NOIRLab). Parallel scientific sessions will continue through the day, ending at 5:45 PM.

For the complete scientific program and to learn more about special events at the 2021 April Meeting, visit april.eps.org.

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For the complete scientific program and to learn more about special events at the 2021 April Meeting, visit april.eps.org.
The APS National Mentoring Community Conference Celebrates Mentorship with Online Meeting

BY LEAH POFENBERGER

Each year, the APS National Mentoring Community (NMC) brings together mentors and mentees at the NMC Conference as an opportunity to build connections, grow in skills, and learn how to get the most out of mentor-mentee relationships. The 2021 NMC Conference, held from March 30 to April 2, continued the tradition with an online format, allowing NMC members to safely gather and connect for a full weekend.

The NMC facilitates mentoring relationships between African American, Hispanic American, and Indigenous undergraduate physics students and local physics mentors. It also seeks to provide students from marginalized ethnic or racial groups with opportunities, connections, professional development, and peer support. The NMC conference is an important mechanism by which students and mentors are provided with resources and training. This year’s conference was organized in partnership with the National Society for Black Physicists, the National Society for Hispanic Physicists, and a State University.

The Virtual NMC conference began on February 18, with a series of community building and networking sessions before transitioning to a more traditional conference format the next day. Workshop sessions, split into mentor- or mentee-focused topics, gave attendees a number of opportunities to gain new skills or learn how to get the most out of mentor-mentee relationships. The conference also provided numerous opportunities for networking and community building through GatherTown, a program that lets users move an avatar through a virtual space to initiate conversations. Three plenary sessions focusing on challenges in physics, ranging from the search for dark matter to creating a more equitable field, featured accomplished women in astrophysics. Chanda Prescod-Weinstein (University of New Hampshire), Jedidah Isler (Dartmouth College), and Brittany Kamai (UC Santa Cruz and Caltech).

The first plenary, titled Dark Matter in the Disordered Cosmos, described how measurement noise in a thermorefractive imaging system can be used to maximize resolution through the phenomenon of stochastic resonance. Yuan Shi (Lawrence Livermore National Laboratory) received the 2020 Marshall N. Rosenbluth Outstanding Doctoral Thesis Award. Shi described how quantum computers operating at cryogenic temperatures could be used to study the behavior of stellar plasmas millions of degrees hotter.

Scott Baalrud (University of Michigan) received the 2020 Thomas H. Stix Award for Outstanding Early Career Contributions to Plasma Physics. He presented a new kinetic theory to understand a state of matter intermediate between plasma and condensed matter. The entire Physics Slam session can be viewed on the Annual Leadership Meeting website: aps.org/meetings/leadership.

ANNUAL LEADERSHIP MEETING Physics Slams Showcases Research by Student and Early Career Award Recipients

BY DAVID VOS

At the APS Annual Leadership Meeting in February, nine students and early career scientists were invited to present rapid-fire three-minute talks on their research. Each of the speakers was a recipient of one of the 20 student and early career awards given by APS every year. This first Physics Slam was organized and moderated by 2018 APS President Alex Feldman. On behalf of APS, I would like to thank Alina Macie for the opportunity to interview her for this article. For physics students who are nearing a decision about their careers and beyond, it is imperative to obtain accurate information about your possible options. She provided insightful information to help students make the right decisions for themselves. For those who are APS members, the IMRctc mentoring website (impact.aps.org) offers opportunities to be mentored by industry professionals who are experts in various corporate fields. — Dan Pisano

Anurag Agarwal (University of Pennsylvania) received the 2021 Early Career Award for Soft Matter Research. She presented her work on modeling living transport networks, such as vascular networks. He stated that the lessons learned can be applied to other structures such as informational networks. Jaroslav Trnka (University of California, Davis) received the 2021 Henry Prizmokoff Award for Early-Career Particle Physics. He presented his recent work on a new geometric framework for understanding particle scattering in quantum field theory called the Amplituhedron.

Jeremy England (Georgia Institute of Technology) received the 2021 Irwin Oppenheim Award. In his talk, he discussed three kinds of self-organization in “life-like” systems such as simple robot groups or spin glasses: self-replication, novelty detection, and many-body dynamical coordination. Bryan Boudouris (Purdue University) was awarded the 2021 John H. Dillon Medal. Boudouris described a new kind of macro-molecule called a radical polymer which provides the opportunity to design new kinds of amorphous organic electronic devices.

Nicholas Piatkowski (University of Maryand, College Park) was recipient of a 2020 Leroy Aperk Award. He presented results of experiments on the resistivity of an electron-doped cuprate that suggest that the high temperature metallic phase behaves like a low density metal.

Elise Koskelo (University of Cambridge) was recipient of a 2020 Leroy Aperk Award. Koskelo described how measurement noise in a thermorefractive imaging system can be used to maximize resolution through the phenomenon of stochastic resonance.

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The virtual APS Physics Slam conference can be viewed on the Annual Leadership Meeting website: aps.org/meetings/leadership. For more information on APS honors go to: aps.org/programs/honors.

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EDUCATION

Federal Policies to Strengthen Science

BY DAVID VOS

A t the APS Annual Leadership Meeting in February, several members and former Rep. Barr Gordon (D-TN-6) tackled legislative challenges and opportunities in restoring science to a place of prominence in the government. The discussion covered topics such as the COVID pandemic as a “Sparks get moined” to spur investment in science and the need to keep open scientific channels of communication even in the midst of global economic competition.

Climate change and alternative energy innovation, immigration reform to retain global talent, and science education were also major topics. The second panel, “Moving Forward in a More Competitive Landscape,” had a conversation about the global situation in science policy. The members of the panel were Sir Peter Knight (Imperial College London), Neal Lane (Rice University), Sethuraman Panuchathan (NSF), and Ellen Williams (University of Maryand). The panel agreed that we are in a Spurtik moment, but not confronting by the twin crises of the pandemic and global climate change. Meeting these challenges will require support from a broad set of stakeholders and attracting the best and brightest from abroad. At the same time, global scientific cooperation in basic research needs to remain open, while continuing to protect economic assets like intellectual property. Moves by the Biden Administration, such as elevating the OSTP Director to a Cabinet position, are a source of encouragement for the panel.

A video recording of the entire event can be found via the Annual Leadership Meeting website: aps.org/meetings/leadership.

ASSIGNMENTS don’t like the best thing you can do is advocate for yourself with your functional manager to ensure that the assignment you are doing is aligned with your career goals and interests. That means you get are aligned with your manager to ensure that the assignment you are doing is aligned with your career goals and interests. That means...
eral chair Michael Marder, the Ethics Committee has developed new policies and procedures for the disclosure of professional conduct in the consideration of individuals for APS honors and leadership positions within the Society. The committee also outlined a process by which a transgressor may be stripped of APS awards, prizes, or Fellowship, removed from an official leadership position, or excluded from APS meetings. The APS Revocation Policy was approved by the Council and the Board in November 2020. According to the new policy, APS will not conduct its own investigations of alleged misconduct. A revocation request must include supporting evidence “from a credible body,” such as an academic institution or governmental agency. The Ethics Committee would then conduct a preliminary review and decide whether to elevate the case to the Board, which would in turn decide whether to convene a subcommittee in that would provide the accused an opportunity to respond to the request. Three of the four panelists would need to vote in favor of revocation for action to be taken.

Educating the community on ethical best practices and how to create positive change within will be a key focus of the committee in 2021, and beyond. To that end, new subcommittees on Research Integrity and Ethics Education have been established. Committee members are also analyzing new survey data of early career and student members collected by the AIP Statistical Research Center that follows up on the original task force surveys conducted in the early 2000s. “The proceedings of the Ethics Committee have gone slowly and deliberately, but we understand there is passion and desire for more,” said Marder, acknowledging concerns of members that the development and enforcement of ethical standards in physics is long overdue. “I am delighted that the American Physical Society has embraced the issue and is hard at work examining our profession from inside to out,” said APS CEO Jonathan Bagger.

The ethics session at the Annual Leadership Meeting included a panel with representatives from industry, a national lab, and academia. Thom Mason described his experience developing an ethics policy while Director of Oak Ridge National Laboratory. The policy was initially drafted by the lab’s lawyers and focused on legal and compliance issues like conflict of interest disclosures. “This was not only a legal issue. There are many things that may be legal but still aren’t right,” said Mason. So he convened a committee of research staff at all levels of the organization, from early career scientists to corporate fellows, to put forth their own policy. “What they came back with was actually a much higher standard that demonstrated the research staff were not satisfied to simply meet the letter of the law.”

“As physicists, we must hold ourselves to the highest ethical standards,” said Bagger. “I look forward to working with the Ethics Committee and the APS membership to deliberately define the standards to which we will hold ourselves and each other accountable.”

The author is APS Head of Public Relations.

The author is Director of FYI.

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**PROGRAMS**

**APS Chapters Pilot Program Holds First All-Chapters Events**

BY LEAH POFFENBERGER

In October 2020, APS launched a new effort to support graduate students, post docs, and early career scientists at their home institutions. The effort, APS Chapters, welcomed its first eight participating institutions in November to begin shaping the program and helping pinpoint what APS resources Chapters members are most interested in.

The eight institutions participating in the Chapters pilot are: Drexel University, Florida State University, The Ohio State University, University of Central Florida, Rochester Institute of Technology, The University of Texas at Arlington, Los Alamos National Laboratory, and Lawrence Livermore National Laboratory. Since their selection, each of the Chapters has elected officers, and begun organizing events for their Chapter members. APS has also organized two all-Chapters events: a workshop for Chapters officers on December 16 and a virtual networking event on February 24, featuring trivia games and a scavenger hunt.

“I am delighted that the American Physical Society has embraced the issue and is hard at work examining our profession from inside to out,” said APS CEO Farah Dawood, Chapters Program Manager. The Physical Review journals staff, for example, is offering training for authors and refers. “I represented the journals during the kick-off event last December and interacted with the representatives of the chapters at that event,” said Warren Lin, APS Head of Editorial Development. “Currently we are in the process of planning a training session with The University of Texas at Arlington Chapter in April.”

While the December event focused on getting to know APS, the February event provided an opportunity for Chapters members to get to know each other—both bonding with their own Chapter and meeting members of other Chapters. Using Gather.town, a platform that gives each person an avatar they can use to move about a virtual world, participants can move around a platform that gives each person an avatar they can use to move about a virtual world, have a great idea for a collaborative project that aligns with the APS mission and our Strategic Plan? Submit a proposal to the APS Innovation Fund

To learn more about the APS Chapters Program or to get information about starting an APS Chapter, visit aps.org/chapters.

Want to know who does what at APS and know who does what at APS and helping pinpoint what APS has to offer…we have so many resources and activities for students, post-docs, and early career scientists just starting out their careers in physics,” said Bicksbaum, who was influential in starting the program during his presidential year. “APS Chapters provide an opportunity to meet and discuss physics, provide resources for activities like seminars and retreats, and also participate in many other activities of the Society.”

The application period to create an APS Chapter as part of the pilot re-opened in early April. Graduate students, post-docs, faculty, or staff members are welcome to apply to start a Chapter at their institution. Chapters are open to graduate students, postdocs, and early career members at their respective institution, with the only requirement being that at least five members of a Chapter are also members of APS. Submitted proposals receive $25,000-100,000/year for up to 2 years. Deadline: April 22, 2021 go.aps.org/innovationfund

The Ethics Committee would then conduct a preliminary review and decide whether to elevate the case to the Board, which would in turn decide whether to convene a subcommittee that would provide the accused an opportunity to respond to the request. Three of the four panelists would need to vote in favor of revocation for action to be taken.

Educating the community on ethical best practices and how to create positive change within will be a key focus of the committee in 2021, and beyond. To that end, new subcommittees on Research Integrity and Ethics Education have been established. Committee members are also analyzing new survey data of early career and student members collected by the AIP Statistical Research Center that follows up on the original task force surveys conducted in the early 2000s. “The proceedings of the Ethics Committee have gone slowly and deliberately, but we understand there is passion and desire for more,” said Marder, acknowledging concerns of members that the development and enforcement of ethical standards in physics is long overdue. “I am delighted that the American Physical Society has embraced the issue and is hard at work examining our profession from inside to out,” said APS CEO Jonathan Bagger.

The ethics session at the Annual Leadership Meeting included a panel with representatives from industry, a national lab, and academia. Thom Mason described his experience developing an ethics policy while Director of Oak Ridge National Laboratory. The policy was initially drafted by the lab’s lawyers and focused on legal and compliance issues like conflict of interest disclosures. “This was not only a legal issue. There are many things that may be legal but still aren’t right,” said Mason. So he convened a committee of research staff at all levels of the organization, from early career scientists to corporate fellows, to put forth their own policy. “What they came back with was actually a much higher standard that demonstrated the research staff were not satisfied to simply meet the letter of the law.”

“As physicists, we must hold ourselves to the highest ethical standards,” said Bagger. “I look forward to working with the Ethics Committee and the APS membership to deliberately define the standards to which we will hold ourselves and each other accountable.”

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to, from Senator Pat Tooney’s office (R-Pennsylvania), loved the APS webpage with all the one-pagers on it—he had never seen that before. Working from that webpage was actually easier than using physical handouts since they could easily fall off the table. He was glad he didn’t have to worry about running out,” she said. “There are certainly benefits to in-person meetings, as well. It’s a little easier to read a person’s reaction in person than on Zoom and to tailor the message accordingly. More importantly, it builds camaraderie and enthusiasm on the CVD team to walk around and spend time together during breaks and meals.”

Addie Jay Mathews, Associate Physics Professor at the University of Dayton, “This is my fourth year in a row of participating in CVD, and every year, I am glad I participated. I had productive and interesting conversations with some of the congressional staffers. However, I missed going to the Capitol, getting conversations with some of the CVD participants and APS staff, especially the debrief meeting at the National Press Club at the end of the day.”

Callie Pruett, Senior Strategist for Grassroots Advocacy, said she was glad to work from a webpage that worked from that webpage were sponsors of a dedicated sessions on partici- pant. She noted, “This year’s April Meeting, where it sponsors a mix of dedicated sessions on parti- cipants, and the Virtual APS Conferences, joint sessions in partnership with other APS units such as the Divisions of Astrophysics (DAP), Nuclear Physics (NUPAP), Physics of Plasmas (PP), and Gravitational Physics (DGRAV), and Physics of Beams (DPhB), encour- age cross-talk and collaboration between these closely related branches of physics.

This year’s April Meeting is scheduled for April 17-20 in a social distancing–friendly virtual format. The agenda is headlined by three plenary sessions: “Science on a Global Scale,” “Advancing an Inclusive Community in Science,” and the Kelvin Foundation Lecture, which will feature the 2020 Nobel laureates in physics.

An in-person meeting or co-sponsoring four focus sessions on topics including conceptualizations of future muon collider facilities, precision measurements with leptons, and quantum computing and as well, invited sessions, including talks detailing the latest results from the CERN Large Hadron Collider, recent advances in theoretical physics, new high energy physics research, and presentations of the division’s to annual awards.

The 2020–2022 mark an especially important period for DPF with the organization of the division’s decadal study, the Particle Physics Roadmap for the 21st Century (PPRC 2021-2030). Also called “Snowmass” after the typical site of the gathering in Snowmass, Colorado, this study provides an opportunity for the particle physics community to come together to identify and document a strategic vision for the next decade of research in the field of particles and beams in the US and abroad. Subsequently, the Particle Physics Project Prioritization Panel (“PP5”) uses the input from Snowmass to define a strategic plan to guide the activities for particle physics research in the US. This also involves identifying top priorities for US Department of Energy and the National Science Foundation, two of the biggest funders of particle physics research.

This kind of planning is essential for particle physics in particular, with its reliance on shared equipment and projects that can last several years to decades.

Because of the COVID-19 pandemic, this year’s community summits, which were postponed until summer 2022, to be held at University of Washington’s Science Fiction Research Association, also held satellite virtual meeting meetings.

Looking inward, the DPF executive committee has identified major goals for the division. First, to continue to advance the field of particle physics, and second, to engage the research community—particularly the next generation of young scientists. To this end, DPF has no shortage of opportunities for peer support, collaboration, and inspiring mentors. Overall, DPF stands as a powerhouse within APS, promoting research, global collaboration, and exchange of ideas at the forefront of our understanding of the most high-profile areas of physics. More information on this can be found on the DPF website.

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Even in certain hair products. In 1994, at home in Texas. He was 83.

Further Reading


Phi...