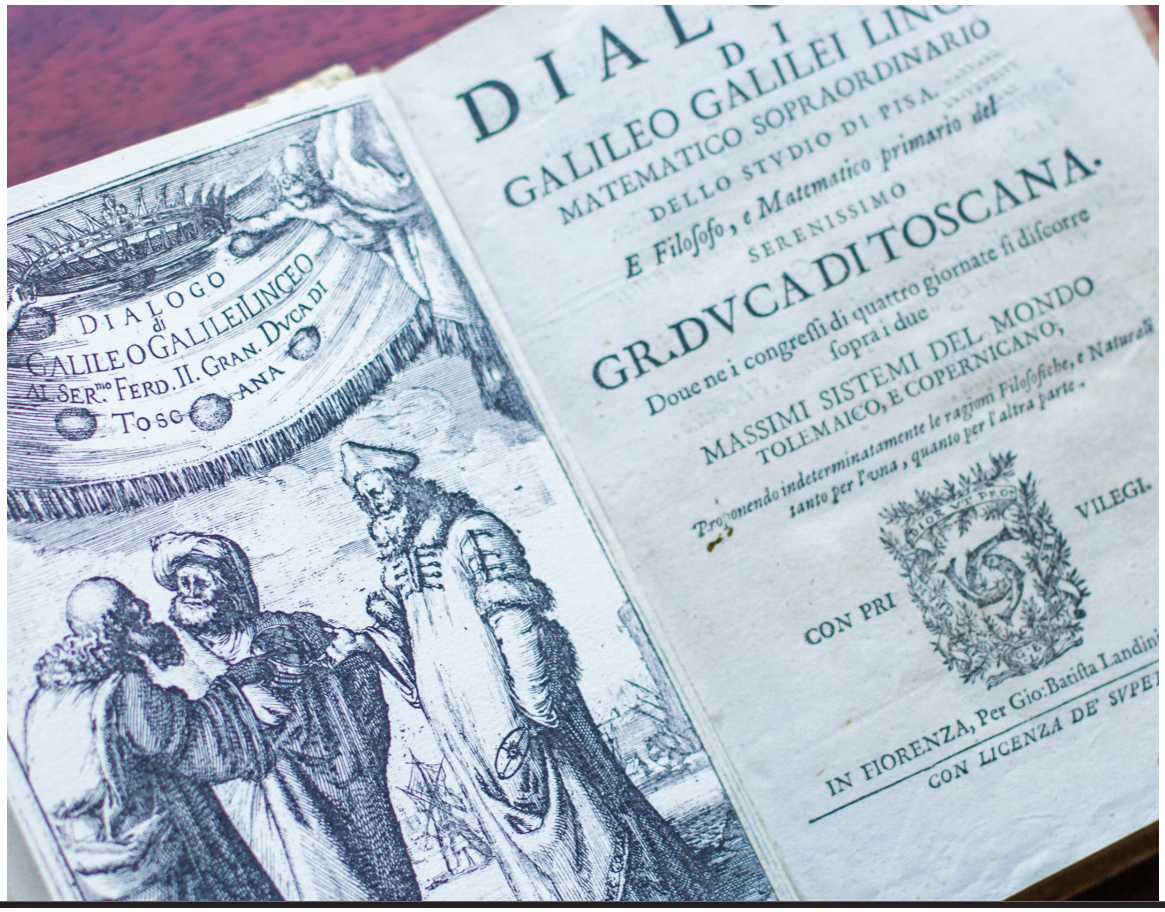
AIP

HISTORY NEWSLETTER

Volume 50 (2018), Number 1



Together We Make History

More on the Physics Heritage & Promise Campaign on page 8

A publication of the American Institute of Physics

ABOUT THE NEWSLETTER

This newsletter is a biannual publication of the Center for History of Physics, American Institute of Physics, 1 Physics Ellipse, College Park, MD 20740; phone: 301-209-3165; e-mail: **chp@aip.org** or **nbl@aip.org**. Editor: Gregory A. Good. The newsletter reports activities of the Center for History of Physics and Niels Bohr Library & Archives, and other information on work in the history of the physical sciences.

IN THIS ISSUE

TO BOLDLY PRESERVE: ARCHIVING THE NEXT HALF-CENTURY OF SPACE FLIGHT

By Angelina Callahan (Historian, Naval Research Laboratory) and Jonathan Coopersmith (Professor, Texas A&M University)

"To Boldly Preserve: Archiving the Next Half-Century of Space Flight" brought nearly 90 archivists, historians, museum curators, scientists, and engineers to the American Center for Physics on March 1-2 to discuss the unprecedented challenges and opportunities facing those who wish to preserve the history of space science, exploration, and exploitation. Funded by the National Science Foundation and hosted by the American Institute of Physics' Center for the History of Physics, the conference discussed the importance of creating, collecting, processing, cataloging, providing access, and making discoverable historical records about spaceflight.

The two days of talks revealed four major audiences to engage on multiple fronts: current and future space actors, retiring space actors, different parts of the federal government, and peers engaged in archiving and historical research and preservation.

Space exploration has extended radically beyond the historical prime movers of Cold War government space agencies. Today over 70 countries have their own satellites, 12 countries or consortia operate launch vehicles, and hundreds of new firms (like SpaceX and Planet), space-oriented non-governmental organizations (NGOs, like the Planetary Society), and institutions like the International Space University are expanding the world of space actors. This growth outside traditional state actors (and state archives) creates new opportunities and challenges.

How can historians and archivists convince these actors about the importance of collecting and preserving their history? What tools and suggestions can be offered to reduce their barriers to capturing the history of their firm or organization?

In market economies, firms fail for a range of reasons; indeed, failure is a normal part of the business world. For historians and archivists, a specific challenge is finding and collecting the papers of failed firms.

As earlier generations of researchers, engineers, technicians, administrators, and users retire, they form both a treasure of untapped personal histories about the first decades of spaceflight, and a disappearing source as people age and die. How can historians and archivists work with these people as individuals and groups to record their stories? Not all actors worked in the space program. Writer Leonard David raised the question of what happens to journalists and their collections when they retire.

The third audience was the federal government, ranging from the classified world of national security (conclusion: better to collect and classify than never to preserve and write a history at all) to the more prosaic but essential world of records management. Underfunded and overworked, records management proved a major concern for the conference. Data collections, especially after a mission ended, and data centers were key areas demanding attention.

The last audience is our peers—archivists, curators, and historians of science and technology. This conference brought different professionals in the same field together, not just to discuss common concerns but in many cases to meet for the first time. Indeed, one of the key results of "To Boldly Preserve" may be the semi-formal establishment of a cross-disciplinary community.

As audiences are evolving, so too are the tools, technologies, and techniques. New forms of electronic communication and data, including oral histories and social media, are changing how archivists and historians work. The rapidly changing forms of digital media are greatly expanding the potential to capture more inclusive and comprehensive historical material, such as emails, tweets, and oral histories. Digital recording also can greatly reduce the resources and skills needed to record an interview or create an online exhibit, as the exciting worlds of community archiving and conferences like Personal Digital Archiving (**https://sites.lib.uh.edu/pda18/**) demonstrate.

Yet digital media are no magic tool. Unlike paper, electronic storage media decay, digital data face challenges of compatibility with different operating systems, formats, and physical equipment. Furthermore, image-rich data, like a video interview, requires much more data storage space than a basic voice recording.

The conference ended with a discussion of explicit and general goals. The most important need is to collect and exchange information. The first step will be creating a one-stop online repository of current archival holdings of spaceflight records, possibly modeled after the AIP International Catalog of Sources (ICOS) for the history of physics. In addition to providing researchers and archivists with a single site of what exists, this effort will also gather archives' collection policies to help match repositories with potential collections.

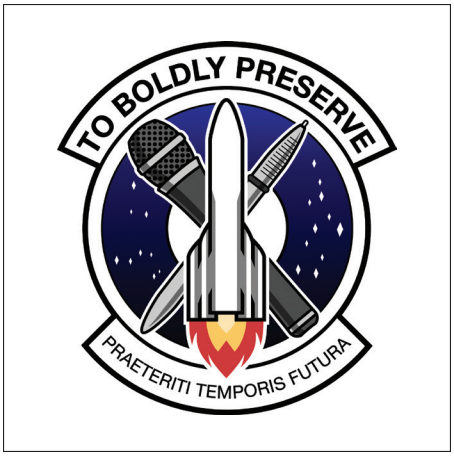
Another goal is creating toolkits of best practices, standards, models, and principles both for our professional communities and for the different audiences of space actors. A major concern was to not reinvent the wheel, but instead to collaborate where possible and make full use of existing tools, such as the British Community Archives and Heritage Group (**http://www.communityarchives.org.uk/**) and the guides offered by the Oral History Association (**http://www.oralhistory.org/web-guides-to-doing-oral-history**).

For the professional communities of historians, archivists, and curators, "To Boldly Preserve" is submitting sessions for the November Mutual Concerns of Air and Space Museums conference and for the October Society for the History of Technology Conference.

In addition, AIP's Melanie Mueller, director of the Niels Bohr Library & Archives, is organizing a workshop alongside the Society of American Archivists meeting. This is the Second Workshop on Scientific Archives (August 13-14, 2018), organized by the Committee on the Contemporary Archives of Science and Technology (C-CAST) of the International Council on Archives/Section on University and Research Institution Archives (ICA/SUV). The aim of the workshop is to explore topics in the contemporary archives of science and technology, including collaboration between scientists and archivists, appraisal of science and technology archives, curating collections to support both humanities and scientific research, scientific data management, and many other related topics.

"To Boldly Preserve" was the first step by a broad community to create, collect, preserve, and promote the history of spaceflight. Just as the conference learned about efforts to record oral histories of computer engineers and scientists, so, too, may the ideas and tools we are promoting benefit other areas of the history of science and technology.

In addition to its website the "To Boldly Preserve"' data management plan includes putting the talks and discussions on YouTube and publishing a selection conference papers. For more information, visit **toboldlypreserve.space** or contact toboldlypreserve@gmail.com.



Associated logo of the conference.

AAPT: HOMER L. DODGE DISTINGUISHED SERVICE CITATION WINNERS

By Steve Iona, Denver University

Homer L. Dodge Distinguished Service Citation Winners: Duane Merrell, Bill Reitz, Toni Sauncy, Joseph Kozminski, and Janelle Bailey, Association of American Physics Teachers Awards Chair and Past President.

The American Association of Physics Teachers (AAPT) was invited to join the American Institute of Physics (AIP) in 1932. This was within months of the Association adopting its first constitution. Among the key players at the beginning were Homer L. Dodge and Paul E. Klopsteg.

Reading from a 1966 history of AAPT written by Vincent Parker (AAPT president 1963–1964) and Charles Wilder (former Chair of Oak Ridge Museum Division), we find that Klopsteg was part of a Committee on Education set up by the American Physical Society (APS) in 1919 to develop a curriculum in physics for teaching physics to engineering students. The Committee's report did not receive wide distribution or discussion, and so those in APS who had interests in physics teaching were limited in their participation and needed to look elsewhere to discuss teaching issues.

Paul Klopsteg became interested in the problems of teaching physics while at the University of Minnesota, where he was an assistant professor in the early 1900s. After his service in World War I, he joined the Leeds and Northrop Company and then moved to positions at the Central Scientific Company (CENCO). In that role, he had regular contacts with faculty across the nation and was able to identify support for a group that would target physics teachers.

In a parallel fashion, "[Homer] Dodge had tried on several occasions to get APS to recognize physics teachers. He had discussed the need for a teacher's organization with Klopsteg first in 1916." Each worked to gather support to form an organization whose purpose would be "the dissemination of the knowledge of physics, particularly by way of teaching." Parker's history continues:

"Twenty-two invited persons and one uninvited individual gathered for luncheon at the Cleveland Club on December 29, 1930." At that meeting, there was discussion about whether the teaching organization should be separate from APS.

"Homer Dodge was at the University of Oklahoma where he developed their school of engineering physics. He brought this practical academic leadership experience and over a decade of respected physics education work within the American Physical Society to the foundation of AAPT. At that luncheon, a committee was formed to prepare plans for a formal organization. Following the passage of the motion, officers were chosen. These were: President, Homer L. Dodge; Vice President, Paul E. Klopsteg; and the Secretary-Treasurer, W.S. Webb."

Klopsteg later served as an AAPT president and still later as chair of the AIP Board in the 1940s.

The contributions of these founders are remembered every year during the AAPT Awards Ceremonies. The Association offers the Homer L. Dodge Citation for Distinguished Service to AAPT. The award allows the Association to highlight member contributions, but also to celebrate the diversity of activities and personalities within the Association. In 1990 the Association established the Klopsteg Memorial Lecture Award to honor Paul E. Klopsteg. This lecture "recognizes outstanding communication of the excitement of contemporary physics to the general public."

Currently, AAPT has about 7,000 members who are teachers in high schools, two-year, and four-year colleges and universities. The Association also works with physics teacher candidates and high school and college students. Regularly, members have been recognized for their contributions to the Association from each of these constituencies.

In 2017, a Distinguished Service Citation went to Duane Merrell (on the left in the photo), associate teaching professor, Brigham Young University, Provo, Utah, for his contributions to teacher preparation both pre-service and in-service. BYU has one of the nation's premiere physics teacher preparation programs. As a former high school teacher, Duane has also been active in the Physics Teacher Resource Agent (PTRA) program, presenting dozens of in-service workshops to over a thousand teachers. He was also part of the AAPT Master Teacher Leader Taskforce.

The International Physics Olympiad is a program that AAPT and AIP have been involved with since 1986. Paul E. Stanley, Dobson Endowed Professor at Beloit College, Beloit, Wisconsin, has served as the coach for the U.S. Physics Team since 2003. He has been very successful in developing the tests used to identify the top U.S. high school physics students, and in training them to compete in the international physics competition. One measure of his success is the number of medals that U.S. Physics Team members have earned during the Olympiad: 22 gold, 16 silver, and 2 bronze medals over the years that Stanley has lead the Team. Paul was recognized at the AAPT Summer Meeting.

The next award recognizes a high school AAPT member for his contributions. William (Bill) Reitz, retired teacher from Hoover High School, North Canton, Ohio, was recognized for his decades of work with the Physics Teacher Resource Agent (PTRA) program. Reitz has also served on the AAPT Committee on Physics in High School and has chaired the Committee on Physics in Pre-High School and the Committee on Science Education for the Public.

Toni Sauncy, associate professor and Department Chair at Texas Lutheran University in Seguin, Texas has been instrumental in working with the Society of Physics Students (SPS), including serving as the Director of SPS and Sigma Pi Sigma (ΣΠΣ) from 2012-2014. SPS and ΣΠΣ are both programs within AIP. While at AIP, Sauncy lead the NSF-Funded Career Pathways project that resulted in valuable resources for undergraduate physics students to use in preparing for career opportunities, emphasizing their physics skills in areas outside of physics graduate programs. Toni also earned a Dodge Distinguished Service Citation.

Next to Toni Sauncy is Joseph Kozminski, faculty member and chair at Lewis University, Romeoville, Illinois. Kosminski chaired a group that developed a key listing of laboratory skills and competencies that are needed by students as part of the "AAPT Recommendations for the Undergraduate Physics Laboratory Curriculum." This document outlines the development that all students in physics programs should address as part of the laboratory component of physics classes. Joe received a Homer Dodge Citation.

AAPT started as a group of about two dozen male college professors interested in the teaching of physics. Within a year, the membership topped 400. The early founders served AAPT, AIP, and other AIP Member Societies in multiple leadership roles. These Association founders are continuously honored through the AAPT awards program that recognizes leaders and contributors from throughout the physics teaching community at levels from high school to university.

Homer Dodge, about the time of the founding of AAPT. Photo credit: Emilio Segrè Visual Archives.

TOGETHER WE MAKE HISTORY

By Mariann Salisbury, Director of Development, AIP

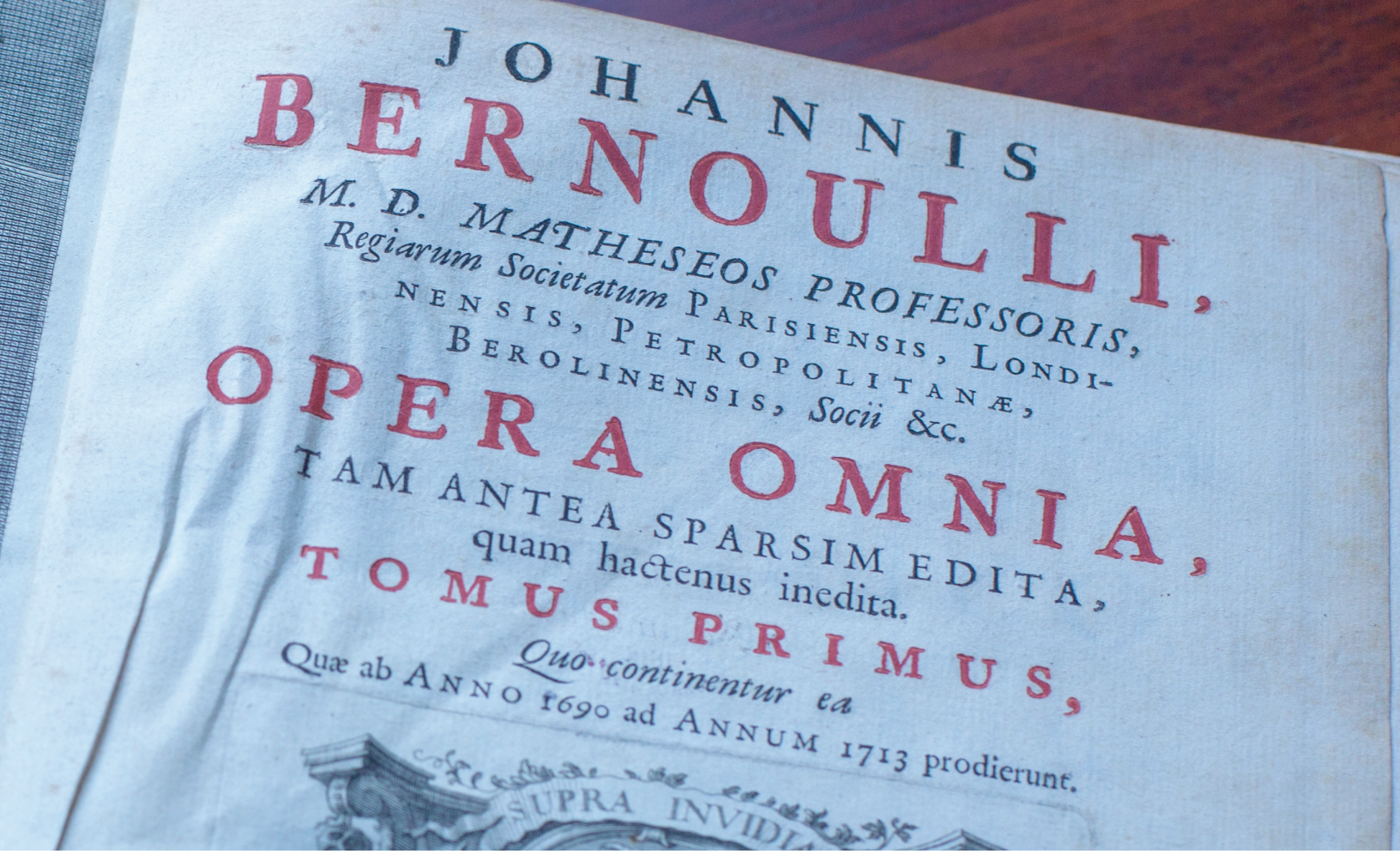
AIP's Center for History of Physics and Niels Bohr Library & Archives invite you to learn more about our Physics Heritage & Promise Campaign.

Some of you have already given to support Phase I of the campaign to acquire the Wenner Collection; with the goal in view, we invite you to participate this spring with a gift that supports the acquisition of these 3,500 rare books and manuscripts.

From the day Robert Oppenheimer spoke at the opening of Niels Bohr Library & Archives in 1962, the library has committed its resources to fulfill its mission to preserve and make known the history of physics. For over 50 years, the library has archived personal scientific materials like unpublished biographies and autobiographical accounts, oral histories and recollections, photographs, and important institutional records in the physical sciences. It has also been a leader in providing broad public access to our collections and creating an International Catalog of Sources that connects and provides access to digitized collections globally. We communicate the excitement of these stories through our web exhibits, visited by hundreds of individuals each year. After we acquire the Wenner Collection, we envision digitizing many of the rare books and manuscripts and promoting research and engagement through additional fellowships, grants, and partnerships.

The collection is currently housed in Mr. Wenner's private library, and has only been accessible within his private circle. AIP now has an opportunity to change that by shining the light of day on this amazing collection for the benefit of all.

With the addition of the Wenner Collection, the Niels Bohr Library & Archives will be a resource for scholars comparable to such important research institutions as the Huntington Library, the Smithsonian Dibner Collection, the Science History Institute (formerly, the Chemical Heritage Foundation), and the Linda Hall Library.



This is the title page of the first edition of Daniel Bernoulli's *Hydrodynamica*, the work that introduced "Bernoulli's principle" and the first model of the kinetic theory of gases (Wenner Collection).

AIP will be filling an important niche in the history of science that complements those of the aforementioned institutions, and in so doing, AIP will have established the Center for the History of Physical Sciences, with significantly expanded resources for scholars, authors, and broad audiences of the general public, so that the incredible human stories of discovery and invention can inspire the next generation of research and innovation.

Gabriel Henderson, Associate Historian and post-doctoral fellow in the Center for History of Physics, explains the significance of the special collection of Oral Histories in the Niels Bohr Library & Archives (NBL&A):

"I have come to appreciate the database of Oral History Interviews available on the NBL&A web page: **https://www.aip.org/history-programs/niels-bohr-library/oral-histories**. I have come to rely on them to clarify the evolution of geophysics as a scientific discipline after World War II. While it would perhaps be too much to elaborate on my research interests, I can declare confidently that having access to interviews conducted by scholars like Spencer Weart and Ronald Doel filled in crucial gaps in my own knowledge. The value of these interviews, from my perspective, has less to do with reinforcing well-known histories of continental drift or nuclear weapons testing and more to do with appreciating the significance of mundane cultural details that are often noted – but hardly elaborated upon. As a historian, those are the nuggets of insight, and indeed the shades and hues of scientists' lives that would be forever forgotten if not for these interviews."

To read more about the collection and participate in the campaign, go to **https://www.aip.org/physics-heritage-and-promise/about-the-collection**.

Cover photo: Fronstispiece and title page of Galieo Galilei's *Dialogo*. One of the many rare books the Physics Heritage and Promise campaign aims to acquire and digitize for public availability.

HISTORY OF PHYSICS IN THE CALTECH ARCHIVES, AND NOW ON THE WEB: HALE, GLASER, AND MORE

By Peter Sachs Collopy and Mariella Soprano, Caltech Archives

The Caltech Archives is digitizing two major collections in the history of physics and astronomy, consisting of the papers of solar astronomer George Ellery Hale (1868–1938) and particle physicist Donald A. Glaser (1926–2013). We are also contributing to the history of physics through new acquisitions of Caltech scientists' papers and a new exhibition on visual thinking in the work and life of Richard Feynman.

The Hale Papers, wrote Daniel Kevles in 1968, "is one of the richest sources for the history of science in the United States in the early twentieth century." In 1968, Caltech and the Carnegie Institution of Washington celebrated the centennial of Hale's birth by publishing this manuscript collection, edited by Kevles, on 100 reels of microfilm. Now, 50 years later, Caltech, the Carnegie Institution, and the Huntington Library are collaborating to scan this microfilm and publish the papers on the web. We plan to have them publicly available by Hale's 150th birthday, June 29, through our website and the Online Archive of California.

This collection extensively documents the development of astrophysics and its instrumentation, as well as the institutional histories of Mount Wilson Observatory, Palomar Observatory, the California Institute of Technology, the National Academy of Science, and the National Research Council. Hale corresponded not only with astronomers and physicists but with prominent scientists across the disciplines, so there's something in the collection for almost any historian of American science in his period. We're excited to make it more publicly accessible.

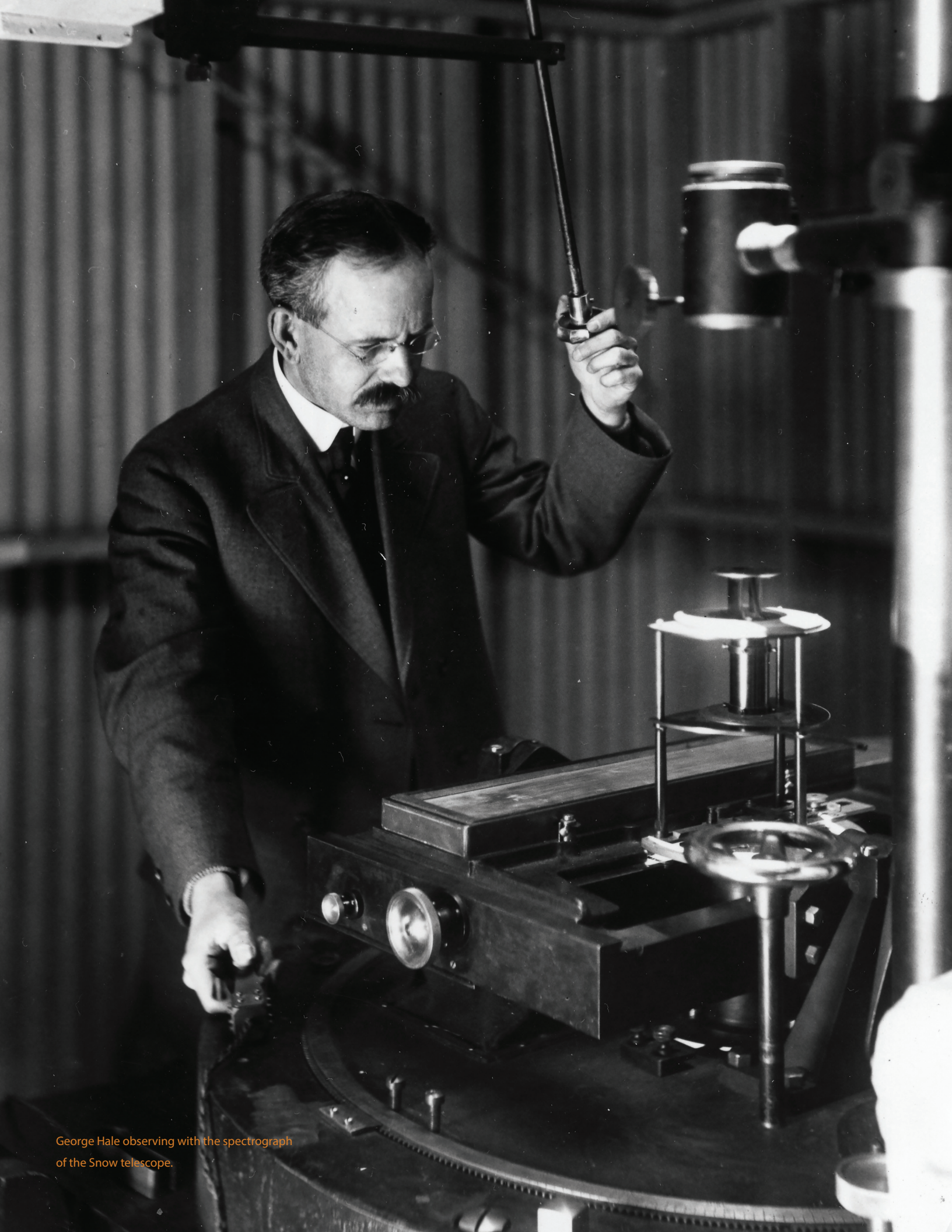
In addition, Caltech has recently collaborated with the University of California, Berkeley to publish the Glaser Papers at **http://glaser.library.caltech.edu**. Glaser opened new fields of both physics and biology by combining theory with engineering. In 1952, he invented the bubble chamber, which enabled physicists to observe the motion of exponentially more subatomic particles, and for which he received the Nobel Prize in 1960. Glaser then catalyzed the growth of molecular biology by devising several machines—with colorful names like Dumbwaiter and Cyclops—for automating experiments with microbial cultures, and by cofounding the first biotechnology company, Cetus, in 1971. From the 1980s into the 2000s, he turned his attention to visual neuroscience.

The Donald A. Glaser Digital Collection presents two physical collections of Glaser's documents, photographs, audio, video, and objects, owned by UC Berkeley and Caltech, respectively, as a single virtual collection, making Glaser's thoughts and insights more easily accessible.

Our major recent acquisitions at Caltech include the papers of physical chemist Ahmed Zewail (1946–2016), who received a Nobel Prize in 1999 for his contributions to femtochemistry, and experimental physicist Ronald Drever (1931–2017), a co-founder of the Laser Interferometer Gravitational-Wave Observatory, or LIGO, which detected gravitational waves in 2016, and for which Drever's co-founders were awarded the Nobel Prize after his death. We are grateful to AIP for financial support which will enable us to rapidly process the Drever Papers this year. (Funding was provided by the AIP Grants to Archives program.)

Finally, we are excited to mount an exhibition entitled "The Mind's Eye: Richard Feynman in Word and Image," on the occasion of the 100th anniversary of Feynman's birth on May 11. It will be located in the Beckman Room on the first floor of Caltech's Beckman Institute.

Please visit our website at **http://archives.caltech.edu** and our Twitter and Facebook feeds at @CaltechArchives for more news of the Caltech Archives.



George Hale observing with the spectrograph
of the Snow telescope.

THE LYNE STARLING TRIMBLE SCIENCE HERITAGE PUBLIC LECTURES FOR 2018

By Greg Good, Director, Center for History of Physics

This year we have a wonderful lineup of lectures, thanks to the generous endowment by Virginia Trimble of this lecture series in honor of her father, Lyne Starling Trimble. All lectures will be at the American Center for Physics in College Park, MD.

May 16, 2018, Evelynn Hammonds, *"The Negro Scientist:" W.E.B. DuBois and the Diversity Problem in Science and the History of Science*

In 1939, the great African American intellectual and scholar W.E.B. DuBois published an essay in the American Scholar entitled "The Negro Scientist." DuBois wrote this essay in response to the statements made by a prominent white American scientist who had publicly noted how few African Americans had made their mark in science. The scientist had stated that "Negroes had made their mark in music, literature, and on the stage, in painting and in some departments of public life, but not often in the exact sciences." DuBois's answer to this question addresses some of the most vexed historical and contemporary issues concerning the persistent underrepresentation of native-born U.S. African Americans, Native Americans, and Latino Americans in the U.S. scientific and technical workforce from the early 20th century to the present. This talk explores a number of questions with respect to the history of African Americans in U.S. science: Why has the inclusion of African Americans into scientific and engineering communities in the U.S. been so difficult? What is it about the way scientists are educated in the U.S. that has led to the systematic underrepresentation and underutilization of African Americans in scientific and technical fields? How is the underrepresentation of African Americans connected to the success of American science and technology? To say it differently, have some exclusions – like those of gender and race – been productive for the U.S. scientific and technical workforce? Why has the study of "race" itself received so little attention in the history of science? And lastly, as Nancy Stepan and Sander Gilman asked over 20 years ago, why is it we know so little about the lived experiences of scientists of color and their responses to the claims made about them in the name of science?

September 12, 2018, Mary Jo Nye, *Shifting Problems in Modern Physics and in the Histories That We Write*

Scientists have been professionally identified with disciplinary fields since the late 19th century, but the questions they ask and the problems they solve are not neatly carved up by disciplinary perimeters. Reward systems such as the highly visible Nobel Prizes appear to offer stable categories that define the physical, chemical, and biological sciences, but these rewards do not in fact reflect disciplinary rigidity. In this talk, I examine some trends in Nobel Prize awards in Physics, focusing on shifts in the disciplinary boundaries and social organization of physics in the course of the 20th century. I tie these developments to changes, too, in the ways in which histories of physics have been written.

October 3, 2018, Jimena Canales, *The Trouble with Einstein's Time*

Current debates about time have left "a hole at the heart of physics" (Scientific American, September 2002). The main problem with contemporary explanations is usually traced to Einstein's theory of relativity, to the notion of a "block universe," and to his famous claim that 'the distinction between the past, present, and future is only a stubbornly persistent illusion'. While some scientists have tried to incorporate elements of our experience of time into our explanations of the universe, others continue to claim that our sense of time is simply illusory. Can these debates be solved by science alone or are they inescapably philosophical, historical, and cultural? My talk will explore the origins of this persistent quandary by focusing on the relation of physics to philosophy, history, and the humanities. Can we solve the problem of time without engaging in "Science Wars"?

November 14, 2018, Benjamin Wilson, *Strategies of Stability: Knowledge, Secrecy, and the Cold War Nuclear Arms Competition*

During the Cold War, American strategic thinkers and defense consultants often said that the goal of nuclear policy was to produce a condition of "stability" between the superpowers. Beginning in the 1960s, some began to argue that nuclear missile defense would endanger stability by amplifying the arms race and worsening the temptation to launch a first strike. In the 1980s, after the announcement of the Reagan administration's Strategic Defense Initiative (SDI), debates over missile defense and strategic stability reached fever pitch. Would SDI enhance stability, or imperil it? This lecture examines some key episodes in the history of nuclear knowledge, showing how the stability idea took shape, and how physicists and other experts embraced various (sometimes contradictory) visions of stability as they wrestled with the nuclear question. As defense consultants with high-level security clearances and prominent academic careers, these thinkers navigated a tricky path between worlds of secrecy and publicity, inside and outside the nuclear complex. For them, stability was as much a term of self-understanding, and of compromise with power and authority, as it was a strategic concept.

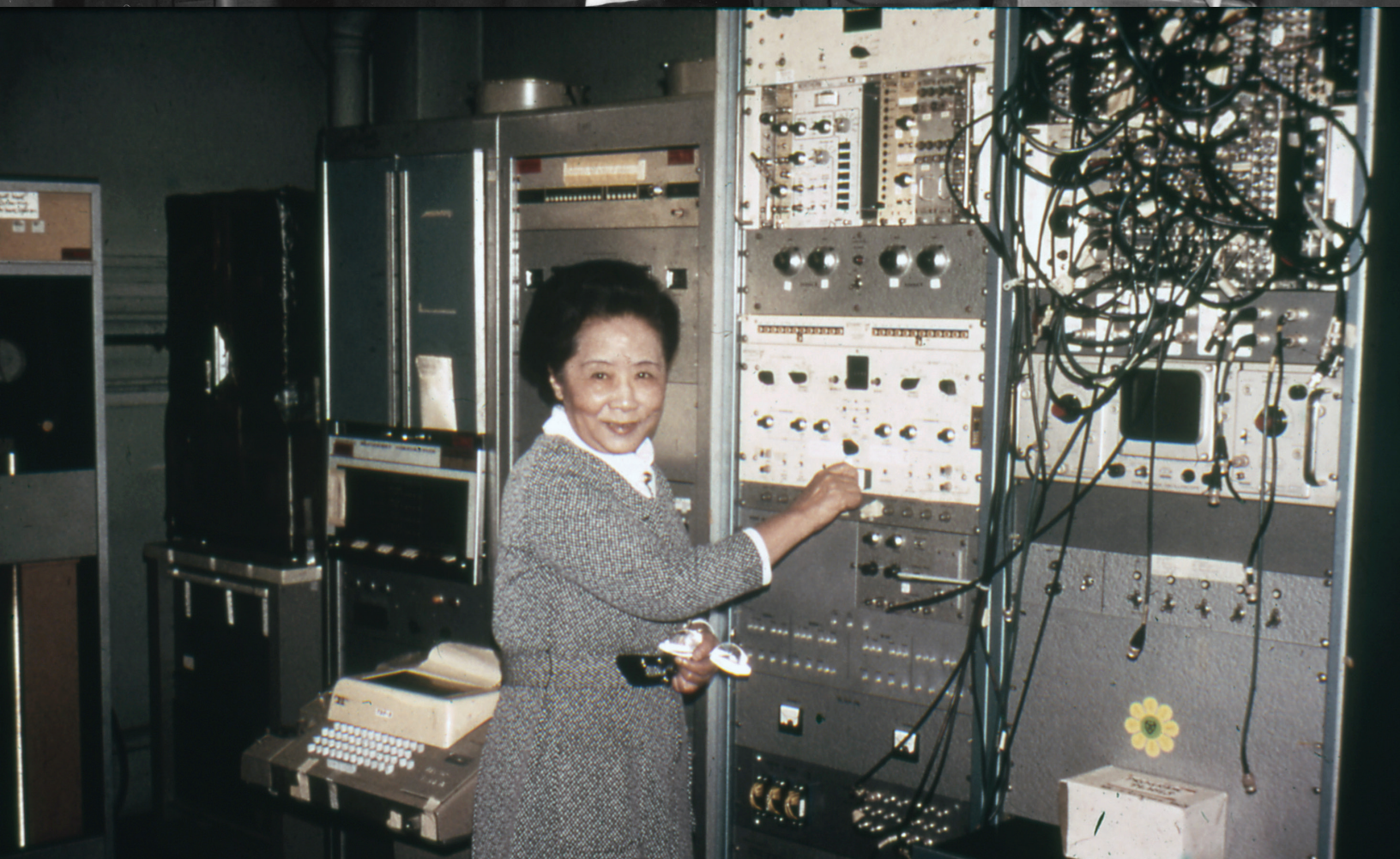
PHOTOS OF THE MONTH SELECTIONS

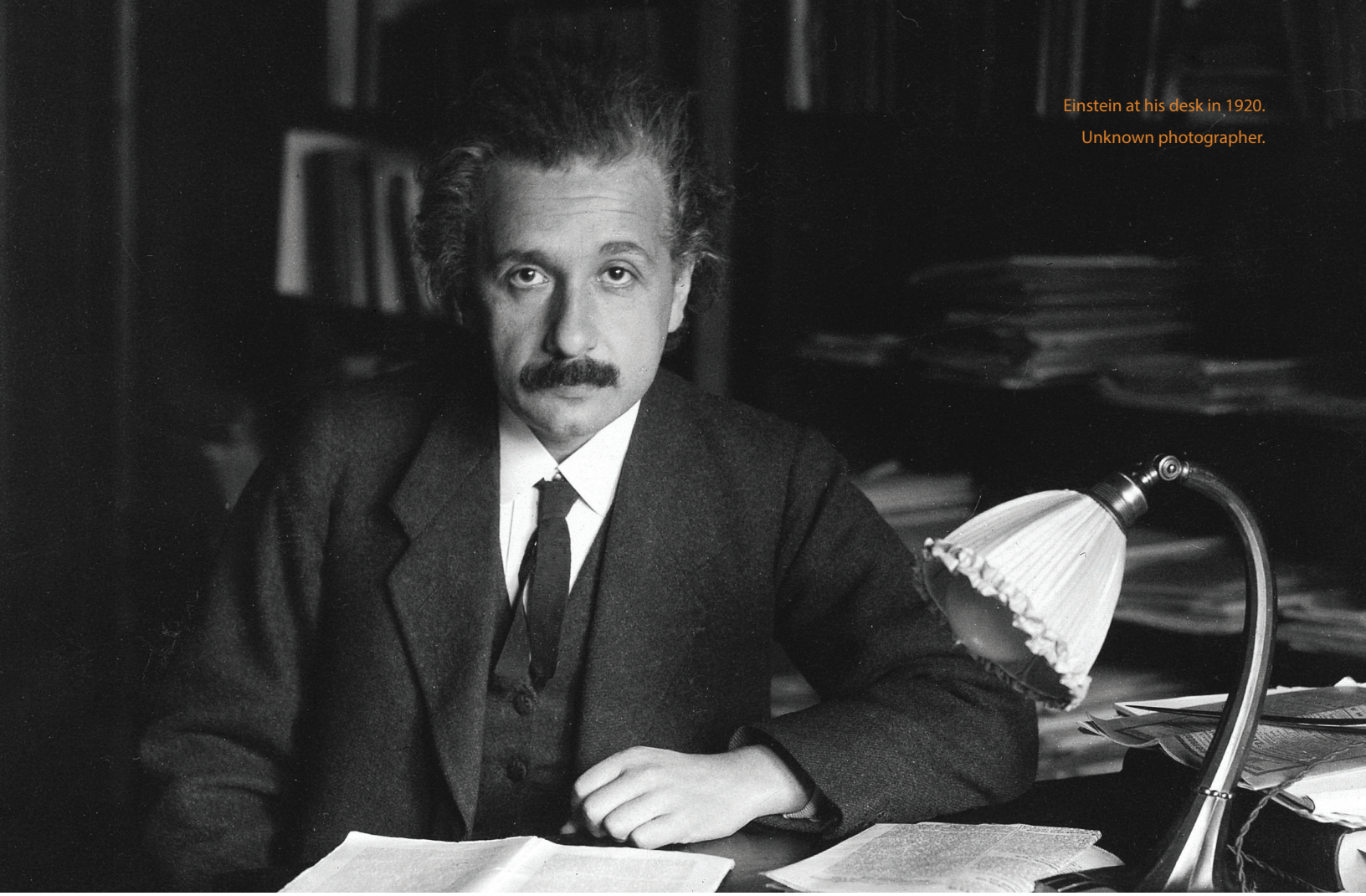
By Audrey Lengel, Photo Librarian, Niels Bohr Library & Archives

Above: Gravitational wave detection researcher and physicist Robert Forward, converses with low-temperature experimental physicist William Fairbank in June, 1970. Credit line: Photograph by Rosemary Gaffney, courtesy AIP Emilio Segrè Visual Archives.

Top right: Prince Philip, Duke of Edinburgh, presenting the first Karl Taylor Compton Award to George Pegram on October 21, 1957, at the dedication of the new headquarters of the American Institute of Physics in New York City. Credit line: AIP Emilio Segrè Visual Archives.

Bottom right: Chien-Shiung Wu, who was nominated for the Nobel Prize in Physics eight times between 1901 and 1966, with the computer system used to control the "exotic atoms" experiment. Credit line: American Association of Physics Teachers (AAPT), courtesy AIP Emilio Segrè Visual Archives.





Einstein at his desk in 1920.
Unknown photographer.

CALTECH AND PRINCETON UNIVERSITY PRESS RELEASE FIFTEENTH VOLUME OF EINSTEIN'S COLLECTED PAPERS

By Diana Kormos Buchwald, Director and General Editor, Einstein Papers Project

Volume 15: The Berlin Years: Writings & Correspondence, June 1925-May 1927, is the latest volume published as a collaboration between Caltech's Einstein Papers Project, Princeton University Press, and the Albert Einstein Archives at the Hebrew University of Jerusalem. It covers Einstein's writings and correspondence on the new quantum theories emerging in the late 1920s, his unwitting collaboration with an academic fraud, and letters to his teenage sweetheart. The almost 100 writings by Einstein, of which a third have never been published, and the more than 1,300 letters contained in this latest volume, show Einstein's immense productivity and hectic pace of life.

The years 1925–1927 were an extraordinarily busy, engaged, and, on occasion, turbulent time in Einstein's life. Despite having won the Nobel Prize in Physics in 1922 for work he had produced nearly two decades before, Einstein remained immensely active at the forefront of scientific research and academic commitments. We find him working daily on the latest developments in modern physics; engaging with his colleagues and perfect strangers in considerate discussions; being a referee

for scientific journals; applying for grants; administering funds and institutions; grappling with personal issues; and being bored in meetings.

The present volume covers a thrilling two-year period in 20th-century physics, for during this time matrix mechanics—developed by Werner Heisenberg, Max Born, and Pascual Jordan—and wave mechanics, developed by Erwin Schrödinger, supplanted the earlier quantum theory. In extensive exchanges with the creators of the new approaches, Einstein quickly recognized their great importance and the conceptual peculiarities involved. From the beginning he preferred wave mechanics over matrix mechanics. He thought he had found a convincing refutation of the probabilistic interpretation of quantum mechanics in what would today be called a hidden variable theory, but he retracted the paper before publication.

In early 1925 he had turned to a new mathematical foundation of unified field theory that generalized Arthur S. Eddington's affine approach on which most of his previous attempts at a unified theory had been based. But he soon abandoned this approach, and in 1927 returned to a different one that he had earlier dismissed: the idea of Theodor Kaluza, further developed by Oskar Klein, that gravity and electromagnetism can be unified by introducing a fifth spacetime dimension. Between these two approaches, and inspired by detailed correspondence with the mathematician G. Y. Rainich, Einstein explored features of general relativity in the hope of finding new hints at how the correct unified field theory might look. This correspondence eventually brought about the important Einstein-Grommer paper of 1927, in which they aimed to derive the motion of particles subject to gravitational fields from the gravitational field equations themselves.

At the same time, Einstein discussed the interpretation of general relativity and unified field theories with the philosopher Hans Reichenbach. It is here that we find the first statements expressing his decade-long opposition to the idea that general relativity shows that gravity is "geometrized."

In a collaboration with Emil Rupp, Einstein became convinced that Rupp's experiments showed that excited atoms emitted light in a finite time (in waves) rather than instantly (in quanta). However, in subsequent years Rupp's experiments could not be reproduced and he was later revealed to have fabricated much of his work. Surprisingly, we found no statements by Einstein so far decrying this mishap.

Much of Einstein's correspondence in this volume engages with Dayton C. Miller's interferometric experiments in which he claimed to have detected an ether drift, overturning the null result of the Michelson-Morley experiment and generating renewed interest in experiments of this type in both Europe and the United States.

As in the past, relativity remained a contested topic among right-wing circles in Germany and abroad. In March 1927, Einstein learned that a high school teacher in Virginia had been charged with blasphemy for teaching relativity. In his sarcastic retort, Einstein lampooned the school's directors, pointing out that they were so lacking in confidence that they needed God's help to assist them in their campaign against relativity.

The current volume encompasses a wealth of documents, ranging over several significant scientific topics, as well as politics, Zionism, and myriad family concerns. We present 535 documents as full text and more than 900 documents in the Calendar of Abstracts. Among the former are 99 writings, of which only 56 have previously been published. They include two dozen scientific papers, drafts, and calculations, as well as poems, aphorisms, homages to Isaac Newton and Hendrik A. Lorentz, more than three dozen appeals and writings on political matters and Jewish affairs, and several patents. Among the 440 letters presented as full text, 270 were written by Einstein. This massive personal and professional correspondence of more than 1,300 letters, and the almost 100 writings show that Einstein's immense productivity and hectic pace of life were more intense during the 24 months covered by this volume than in the previous two years.

He undertook several unsuccessful attempts to reduce his involvement in various spheres of activity and to balance private life, work, and public roles. In mid-June 1925, Einstein informed Mileva Marić that he felt well after his South American trip because the return voyage had been "so restful." However, merely eight days later, he wrote to Paul Ehrenfest and others that he did not intend to travel either to Pasadena or to Petrograd, as he needed to be "more frugal with his nerves." During 1926, Einstein attempted to lighten the burden of responsibilities. In January, he offered his resignation from the board of the German League of Human Rights, but eventually decided to remain on it. He also informed the Marxist-Zionist party Poale Zion that he would no longer support multiple individual Jewish causes since the overuse of his name would lead to its devaluation. In this spirit, he also let the World Union of Jewish Students know that he had "resigned [his] honorary position as king of the schnorrers for good."

The 1925 Locarno Treaties renewed Einstein's optimism in the prospects for European reconciliation. He continued to participate in the League of Nations' International Committee on Intellectual Cooperation and efforts to end the boycott of German scientists. He also remained committed to the shaping of the Hebrew University in Jerusalem, although his enthusiasm for this cause was sorely tested during these years.

Einstein received many honors, among

continued on page 18

them the Royal Society's Copley Medal, the Royal Astronomical Society's Gold Medal, and election as corresponding member of the Academy of Sciences of the USSR. He was also offered a faculty position at Johns Hopkins University.

While the new volume focuses on the years 1925–27, it also includes hitherto unknown, much earlier correspondence between the sixteen-year-old Einstein and members of the Winteler family, with whom he lodged while attending the Aargau Kantonsschule in 1895–1896. In 2015, the Bernisches Historisches Museum made accessible a bundle of letters and postcards written by Einstein that had been obtained from the Winteler family estate. Most of these letters are addressed to the eighteen-year-old Marie Winteler, his hosts' daughter, with whom he became romantically involved at the time. They also include a "Contract for the Purchase of a Box of Water Colors," drawn up with great, yet most likely, mock seriousness, by Einstein and his cousin, Robert Koch. Some of the items only exist as fragments or snippets, as many were torn and subsequently glued back together. Prior to the release of this new correspondence, only one letter by Einstein to Marie, and two letters by Marie to Einstein, were known to scholars. The 34 documents from this collection now published in Volume 15 reveal Einstein's passionate and tender sentiments toward Marie. Einstein mentioned to Marie his difficulties in being a disciplined correspondent, an issue he would often return to in later years, and allows glimpses into his career ambitions as well. On the eve of his departure from Aarau to take up his university studies at the ETH, he reported a conversation with the rector of the Kantonsschule during which he was told that he possessed the prerequisites for an academic career and was advised not to take up a position as a schoolteacher.

In a surprising turn of events hitherto unknown to scholars, three letters and one postcard written by Einstein in 1909–1910 reveal that his love for Marie was rekindled at that time; more than a decade after their first relationship had ended. They apparently had a brief romantic encounter in 1909, by which time Einstein had already been married for over six years to Mileva Marić. But Marie seems to have ignored his subsequent advances, eliciting feelings of utmost anguish in Einstein. In his despair, he wrote in September 1909 that he felt "as if dead in this life filled with obligations, without love and without happiness," decrying his "failed love, failed life, that's how it always reverberates to me."

We are always asked, "Is there anything we don't know about Einstein after all these years?" And as editors of the Einstein Papers Project we always reply, "Yes, there is a lot that we are learning and discovering." Published beginning in 1987, The Collected Papers eventually will comprise nearly 30 volumes and will contain more than 14,000 documents. Sponsored by the Hebrew University of Jerusalem and Princeton University Press, the project is located at and supported by Caltech.

DOCUMENTATION PRESERVED

Compiled by Amanda Nelson, Archivist, Niels Bohr Library & Archives

Our report of new collections or new finding aids is based on our regular survey of archives and other repositories. Many of the collections are new accessions, which may not be processed, and we also include previously reported collections that now have an on-line finding aid available.

To learn more about any of the collections listed below, use the International Catalog of Sources for History of Physics and Allied Sciences at **www.aip.org/history/icos**. You can search in a variety of ways, including by author or by repository.

Please contact the repository mentioned for information on restrictions and access to the collections.

NEW COLLECTIONS

American Philosophical Society. Library. 105 South Fifth Street, Philadelphia, PA 19106, USA

George T. Reynolds papers. Collection dates: 1940-2000. Size: 17 linear feet.

California Institute of Technology. Institute Archives. 1201 East California Blvd. (Mail Code 015A-74), Pasadena, CA 91125, USA

Air Talk: The Caltech Edition Audio-video collection. Collection dates: 1988-2002. Size: 70 audio-analog cassette 70 video-analog VHS 70 video-analog 3/4" Umatic

Earnest C. Watson Lecture Series. Collection dates: 1971-present. Size: ca. 90 audio-analog cassette. ca. 180 video-analog miscellanea. ca. 100 video-digital miscellanea.

Donald A. Glaser papers. Collection dates: 1943-2013 [bulk 1949-2003]. Size: 15.97 linear feet (41 boxes).

Carnegie Institution of Washington. Department of Terrestrial Magnetism. Library and Archives. 5241 Broad Branch Road NW, Washington, DC 20015, USA

Oliver H. Gish papers. Collection dates: 1900-1988 [bulk 1920-1952]. Size: 9.5 linear feet (25 document cases; 1 clam shell box).

Duke University. Rare Book, Manuscript, and Special Collections Library. P.O. Box 90185, Durham, North Carolina, 27708, USA

Maria Mitchell letters. Collection dates: ca. 1846-1868. Size: 0.1 linear feet (3 items).

Lehigh University. Linderman Library. Special Collections. Bethlehem, PA 18015-3067, USA

Michael Polanyi publications compiled by Gilbert Doan. Collection dates: 1952-1970. Size: 0.5 linear feet (1 box).

Lowell Observatory. 1400 West Mars Road, Flagstaff, Arizona 86001, USA

Gerald Kron papers. Collection dates: 1934-2005. Size: 5 linear feet (7 boxes).

Katherine Gordon Kron papers. Collection dates: 1935-2011. Size: 2.5 linear feet (5 boxes).

New York University. Archives. Elmer Holmes Bobst Library. 70 Washington Square South, New York, NY 10012, USA

continued on page 20

Joseph Edmund Woodman papers. Collection dates: 1933-1940. Size: 0.5 linear feet.

Oberlin College. Archives. 420 Mudd Center, Oberlin, OH 44074, USA

Robert W. Fuller papers. Collection dates: 1960-1980. Size: 19 linear feet.

United States Air Force Academy. Library. Special Collections Branch. Colorado Springs, CO 80840-5701, USA

Record for colloquium on fundamental physics: record of weekly meetings, topics, and speakers. Collection dates: June 18, 1958 - Nov. 30, 1961. Size: Approximately 75 leaves.

John William Strutt Rayleigh and Robert John Strutt Rayleigh collection. Collection dates: 1865-1976. Size: 33 linear feet.

University of Arizona. Library. Special Collections. Tucson, AZ 85721, USA

Use of Solar Energy Conference papers. Collection dates: 1954-1957. Size: 1.1 linear feet.

Donald M. Hunten papers. Collection dates: 1925-2011 (bulk 1946-2010). Size: 1.5 linear feet.

Peter Smith papers. Collection dates: 1970-2017 (bulk 1993-2008). Size: 108 linear feet.

Wieslaw Z. Wisniewski papers. Collection dates: 1939-1994 (bulk 1976-1990). Size: 9 linear feet.

University of California, Los Angeles. University Research Library. Department of Special Collections. Los Angeles, CA 90024-1575, USA

Nina Byers papers. Collection dates: 1946-2006. Size: 2.4 linear feet (6 boxes).

Margaret Galland Kivelson papers. Collection dates: 1950-2008. Size: 7.8 linear feet (19 document boxes and 1 half box).

Louis B. Slichter papers. Collection dates: 1906-1984. Size: 16.2 linear feet (14 cartons, 2 boxes, 1 flat box, and 1 oversize flat box).

Kenneth N. Trueblood papers. Collection dates: 1947-1998. Size: 34.8 linear feet (31 record storage cartons, 6 document boxes, 1 flat box, and 1 oversize flat box).

University of Colorado. Libraries. Western Historical Collections. Campus Box 184, Boulder, CO 80302-0184, USA

James Faller papers. Collection dates: 1960-1980. Size: 13.5 linear feet (8 boxes).

Carl Kisslinger papers. Collection dates: 1970-1990. Size: 13.7 linear feet.

Edward Martell papers. Collection dates: 1962-1995. Size: 67.5 linear feet (45 boxes).

University of Colorado Astro-Physical Planetary & Atmospheric Sciences papers. Collection dates: 1950s-1960s. Size: 1.5 linear feet.

University of Colorado Cyclotron records. Collection dates: 1962-1981. Size: 175.5 linear feet.

Washington University. Libraries. University Archives. Campus Box 1061, One Brookings Drive, St. Louis, MO 63130-4899, USA

Washington University Department of Physics course lectures and colloquia collection. Collection dates: 1994-2005. Size: 20 items.

NEW FINDING AIDS

Denison University. W. H. Doane Library. University Archives. Granville, OH 43023, USA

Richard H. Howe papers. Collection dates: 1901-1968. Size: 2 boxes.

Leon E. Smith papers. Collection dates: 1928-1961. Size: 1 box.

Hoover Institution on War, Revolution and Peace. Archives. Stanford University, Stanford, CA 94305, USA

Harold M. Agnew miscellaneous papers. Collection dates: 1943-1994. Size: 1 manuscript box, 2 oversize boxes, 1 film reel.

Akademiia nauk SSSR, Sibirskoe otdeleniie miscellaneous records. Collection dates: 1967-1986. Size: 1.6 linear feet (4 boxes).

Albert V. Baez papers. Collection dates: 1955-2004. Size: 22.6 linear feet (51 manuscript boxes and 1 oversize box).

Willy Achim Fiedler papers. Collection dates: 1933-1998. Size: 9.1 linear feet (16 manuscript boxes, 1 oversize box 3 oversize folders).

Paul J. Flory papers. Collection dates: 1975-1986. Size: 3.2 linear feet (8 manuscript boxes).

Fred Charles Iklé papers. Collection dates: 1972-1988. Size: 10.8 linear feet (26 manuscript boxes).

John H. Morse papers. Collection dates: 1957-1973. Size: 1.6 linear feet (4 manuscript boxes).

Robert S. Norris papers. Collection dates: 1898-2003. Size: 90 manuscript boxes.

Fred B. Rhodes papers. Collection dates: 1944-1980. Size: 22 manuscript boxes.

Lehigh University. Linderman Library. Special Collections. Bethlehem, PA 18015-3067, USA

Albert De Neufville papers. Collection dates: 1952-1966. Size: 8 linear feet (15 boxes).

New York Public Library. Rare Books and Manuscripts Division. Fifth Avenue and 42nd Street, New York, NY 10018, USA

Gherardi Davis papers. Collection dates: 1828-1940. Size: 3 linear feet (8 boxes).

Emergency Committee in Aid of Displaced Foreign Scholars records. Collection dates: 1927-1949. Size: 98.5 linear feet (222 boxes). Berendsohn and Foerster files: 1 microfilm reel.

New York University. Archives. Elmer Holmes Bobst Library. 70 Washington Square South, New York, NY 10012, USA

Daniel Hering papers. Collection dates: 1889-1939. Size: 1 linear foot.

Rockefeller Archive Center. 15 Dayton Ave., Pocantico Hills, North Tarrytown, NY 10591-1598, USA

John Z. Bowers papers. Collection dates: 1951-1980. Size: 25 cubic feet.

University of California, Los Angeles. University Research Library. Department of Special Collections. Los Angeles, CA 90024-1575, USA

Irving Krick papers. Collection dates: 1921-1996. Size: 58 linear feet (116 boxes, 7 oversize boxes).

University of Colorado. Libraries. Western Historical Collections. Campus Box 184, Boulder, CO 80302-0184, USA

Albert A. Bartlett papers. Collection dates: 1940-2012. Size: 109.5 linear feet.

Bernhard Haurwitz papers. Collection dates: 1920s-1986. Size: 11.5 linear feet (25 boxes).

Oliver C. Lester papers. Collection dates: 1937-1951. Size: 0.5 linear feet.

Walter Orr Roberts papers. Collection dates: 1940-1990. Size: 126 linear feet.

continued on page 22

Alan H. Shapley papers. Collection dates: 1948-1964. Size: 2.5 linear feet.

University of South Dakota. I. D. Weeks Library. University Archives. Vermillion, SD 57069, USA

Lewis E. Akeley papers. Collection dates: 1900-1963 (bulk 1916-1959). Size: 1.5 linear feet.

University of Wyoming. American Heritage Center. Dept. 3924, 1000 E. University Avenue, Laramie, WY 82071, USA

Sherwin F. Kelly papers. Collection dates: 1938-1975 (bulk 1959-1975). Size: 1.35 cubic feet (3 boxes).

Robert Anthony Rivera papers. Collection dates: 1912-1991. Size: 113 cubic feet (127 boxes).

FRIENDS OF THE CENTER FOR HISTORY OF PHYSICS

We gratefully acknowledge the support of many Friends whose contributions have helped to preserve and make known the history of physics and allied sciences. This list is our public acknowledgment of Friends who contributed in 2017 to the Center for History of Physics. Patrons contributed $2,500 or more; Sponsors contributed $1,000 to $2,499; Colleagues contributed $500 to $999; Associates contributed $250 to $499; and Members up to $249. Bookplate donations honor or memorialize a colleague while supporting the purchase or conservation of rare books. * Designates our Physics Heritage Donors, who have given each year for the past seven years or more. + Designates a recently deceased donor. If you would like to join the Friends in supporting the Center for History of Physics, please write to us at: One Physics Ellipse, College Park, MD 20740-3843, call 301-209-3006, e-mail development@aip.org, or visit our web page at **https://donate.aip.org/helphistory**.

PATRONS

Robert A. Morse
Benjamin B. Snavely
Virginia Trimble

SPONSORS

Lewis M. Branscomb
Marc H. Brodsky*
James R. Clynch*
Hans Frauenfelder*
Roderick M. Grant*
Judy C. Holoviak*
Kate P. Kirby
Hans Mark
Ronald E. Mickens
Robert & Sarah Newcomb
John B. and Patricia N. Pegram
John J. Regazzi
Gordon P. Riblet*
Keith Runge*
Stephen L. Shapiro
Luther W. Smith*

COLLEAGUES

William T. Bridgman
Elizabeth Dart Caron
David C. Cassidy
Joseph Cerny
Edward K. Conklin
Beth A. Cunningham
David DeVorkin
Loyal Durand
H. Frederick & Linda Dylla
Arthur Eisenkraft
Theodore & Frances H. Geballe
Bernard Gottschalk
Donna Hammer
Bill Hassinger
Warren Heckrotte
Kenneth R. Hogstrom
John Kent
Toichiro Kinoshita
Daniel Kleppner
Arlin J. Krueger
Arlo U. Landolt
Harry Letaw
Christopher H. Marshall
Jagadeesh Moodera and Geetha Berera
Merete Nieto
Rex D. Pendley
Robert K. Rader
Steven R. Riedhauser
Gary W. Sjolander
James L. Smith
James H. Stith
Spencer R. Weart

ASSOCIATES

Gordon A. Baym
Stephen A. Becker
David Berley
John David Bohlin
Derek Boyd
William F. Brinkman*
Stephen Chase and Margaret Ayres
Edward N. Clarke
Morrel H. Cohen
Jack H. and Rita Colwell*
John Cook*
Peter Cziffra*
Eleanor C. Dahl
Alexander K. Dickison
Guy T. Emery
William & Nancy E. Evenson*
Paul Forman
Edwin Fuller*
James E. Hammerberg*
Shaun Hardy*
David John Helfand
Arthur N. Hicks
Charles H. Holbrow
Rush D. Holt
David W. Ignat
James S. Jarratt*
Richard R. Joyce
Charles F. Kennel
Kern Kenyon*
Ray E. Kidder
Charles H. King*
Bruce A. Kowert
Louis J. Lanzerotti*
Rudolf Ludeke
Jill Marshall
John L. McClure*
Bernhard P. Molldrem
Hendrik J. Monkhorst
Dwight E. Neuenschwander
Philip E Nielsen
Catherine O'Riordan
William & Janice Parker
William F. Pickard*
John S. Price
Don D. Reeder
Randolph A. Reeder*
William A. Reupke
Diana W. Rigden
John S. Rigden+
R. G. Robertson*
D. Keith & Margaret B. Robinson
Carl Rosenfeld*
Mike Ruby
Alan E. Shapiro*
Ronald K. Smeltzer
Charles M. Sommerfield*
David Strozzi
David Surman
Catherine Swartz
Richard D. Taylor
Jean-Francois S. Van Huele*
Bill Weaver*
Brenda & Manfred Winnewisser
George O. Zimmerman

MEMBERS

Louis W. Adams*
Lewis E. Agnew
David J. Allard
Harvey A. Alperin
Lawrence Alquist
B. Jeffrey Anderson
Gordon W. Anderson
Richard J. Anderson
Anonymous
Michael W. Arenton*
Ivan P. Auer
Dewayne A. Backhus
R. C. Bailey
Ewa M. Basinska
Sunanda Basu
Steve Bauer
Irene Beardsley and Dan Bloomberg
Frederick D. Becchetti
Leila A. Belkora
Howard C. Berg
Arthur Bienenstock
Ignacio & Jennifer Birriel
Steven A. Bleier
Charles A. Bordner*
J. Daniel Bourland
Timothy H. Boyer
Matthew Briggs and Brenda Dingus
Donald W. Brill
Daniel Brodrick
John C. Browne
Henry Burden
William Burdett
Patricia V. Burke*
Bruce C. Burkey
Earl F. Burkholder
Nancy A. Burnham
Stephen H. Burns*
Warren E. Byrne*
Andrew C. Campbell
Michael J. Capparelli
Bartley L. Cardon
Robert E. Carter
Diego Jesus Castano
William C. Cavallo
Jagdish Chander
Thomas M. Christensen*
Kurt Christoffel
Richard T. Close
John Cloud
Katherine M. Condon
Robert C. Cook*
Vera-Anne V. Corwin
Patrick Crane*
Stephen Craxton*
John F. Cummings
Bruce H. Curran
Gerald Cuzelis
Teymour Darkhosh
Jan & Lynn W. Dash*
Luis de la Pena
Robert L. De Zafra*
Kenneth G. Demers
Samuel Denham
Dolores C. Derrington
Stanley Deser
William S. Dickey
Allen C. Dotson
Richard G. Dower
Richard J. Drachman*
Judy Dubno
Michael D. Duncan
Larry & Judith V. East
David Ehrenstein
Theodore L. Einstein
Fred T. Erskine*
Christina Everett
Sandra M. Faber
Donald C. Faust, Jr.
Steven R. Federman*
Richard B. Feren
Alexander L. Fetter
Carl C. Fields
Arvel L. Fincher
Philip C. Fisher
Michael E. Fisher*

continued on page 24

Judith Flippen-Anderson+
Allen Flora*
Jerry W. Forbes
John Fournelle
Kenneth Fowler*
W. B. Fowler
Eduardo H. Fradkin
Albert J. Franco
Michael W. Friedlander
Klaus Fritsch
Stephen A. Fulling
Ronald V. Furia
Mark R. Gander
Robert T. Garcia
Donald F. Geesaman
Donald Gelman
Sam H. J. Ghaleb
Patrick C. Gibbons
Owen Gingerich
Robert P. Godwin*
Joshua N. Goldberg*
Gordon L. Goodman*
Paul N. Goodwin
Joel Gordon
Leon Gortler*
Harvey A. Gould
Clemence R. Graef
Richard W. Granville
Thomas Gross
Thomas H. Groves*
Sol M. Gruner*
Jeffrey Guenzel
William J. Gunning*
Rajendra Gupta*
Blanca L. Haendler
Melvyn L. Halbert*
Thirumala R. Halemane
Joseph H. J. Hamilton
Philip W. Hammer
Jorgen L. Hansen*
Wesley H. Harker*
Marguerite Harning
Alan W. Harris*
Frederick A. Harris*
Jeffrey C. Hecht*
Lewis C. Hecht*
Otto Heinz
Leon Heller
Stephen M. Henning
Dennis C. C. Henry
George A. Herbert
Thomas W. Hickmott
Jeanne Hladky
Christine A. Hlavka
Lillian H. Hoddeson
Rosamond Hooper-Hamersley
David C. Johannsen
Robert L. Johnson
Kevin M. Jones
Lawrence W. Jones*
Michael D. Jones*
H. J. Juretschke*
Keith Kalinowski
Boris and Susan Kayser
Thomas Kelsall
Mary Kay Kenney
Mark B. Ketchen
Daniel J. Kevles
Paul I. Kingsbury
M. B. Kirkham
Adrienne and Rocky Kolb
Rikio Konno*
Victor Korenman*
Thomas A. Koster*
Paul Kozlowski
Michael A. Kriss
John Kronholm*
William H. Kuhlman
Jeffrey Laba
Roger O. Ladle*
Muriel J. Landauer
Neal F. Lane
Michel L. Lapidus
James D. Larson*
Robert G. Lauttman
A. C. Lawson*
Richard G. Leamon
Harvey S. Leff
Patricia and Michael Lengel
David R. Lide
Daniel Lister
Chelcie B. Liu*
C. D. Livengood*
Peter N. Lombard
John H. Lowenstein
Thomas Lucatorto
Tim Lynch
David D. Lynch*
Maura & Michael J. Mackowski*
Mark L. Maiello*
Vincent M. Martinek
Frederick J. Mayer
Charles W. McCutchen
Walter O. McDonald
John A. McKinney
Priscilla J. McMillan
Jonathan Mersel
Irving Michael
Andre F. Michaudon
John Michel*
Keith R. Milkove
Herman L. Miller
Mark B. Moffett*
Kurt R. Moore*
Kevin Moran
Faith Morrison
Steven A. Moszkowski
Eduardo R. Mucciolo
George P. Mueller*
Mark R. Mueller*
Daniel E. Murnick
Charles Myers
Mark Nagumo*
Anthony V. Nero
Rosalind Nissim
Richard J. Noer*
Marilyn E. Noz
Mary Jo Nye
Jan H. J. Oelering
Tonis Oja
William H. Orttung*
Geraint & Ruth Owen*
Lyman Alexander Page
Neil K. Perl*
Peter Pesic*
Michael Plett*
Martin C. Predoehl
Monroe S.Z. Rabin
Lanny Ray
Joseph Reader
George Redlinger*
Antonio Redondo
Robert P. Redwine
Chester S. Reft
T. Douglas Reilly
Sherry Render
Wayne & Jane Repko
Stephen L. Richter
Richard A. Robie
Howard K. Rockstad*
Edward John Rojek*
Robert Rolewicz
William M. Roquemore

Kenneth L. Rose*
Lawrence G. Rubin*
John Rumble
Kenneth S. Rumstay
David A. Russell
Robert Sahakyan
Akira Sakai
Roberta P. Saxon*
Morton Schagrin
Robert and Barbara Schneider*
Jack Schneps*
Alan Schoenfeld
Jonas Schultz
Brian B. Schwartz*
Bertram M. Schwarzschild
Frederick D. Seward*
Howard Shafer
Wesley L. Shanholtzer
Yitzhak Y. Sharon
Joseph C. Shields*
Daniel M. Siegel
Jag J. Singh
Eugene R. Smith*
Lary R. Smith
Webster F. Smith
James L. Snelgrove*
Arnold L. Snyder*
Daniel I. Sober
David L. Soderberg
Siavash H. J. Sohrab
Sanjay Sood
Lee R. Sorrell
Cherrill M. Spencer
Frieda A. Stahl*
Robert W. Standley*
Gary Stanton
Walter A. Stark
Richard Stephens*
Frank Stern*
Cheryl and Ed Stevens
Donald T. Stevenson
Ian E. Stockdale*
Bertram and Lynne Stries*
Curtis J. Struck
Harry Stuckey*
Folden B. Stumpf
Jean H. Swank
Julius Tabin
Harvey D. Tananbaum
Ralph Tauke
James W. Taylor*
Marylin R. Taylor
Joseph S. Tenn*
Dennis J. Teskey
George Tessler*
David R. Thiessen
Deborah Toll
Sam B. Trickey
Alvin W. Trivelpiece
William L. Unger
Bjarne E. Ursin
Randy C. Van Vranken
Robin & Antoinette Verdier*
David L. Wallach
Peter J. Wanderer
Charlotte Ward
Robert T. Ward
George D. Watkins*
Nathaniel Weisenberg
H. Arthur Weldon
Samuel A. Werner
Ralph M. Wilcox*
Donald Wilke*
James F. Woodward
Bradford L. Wright
Roy L. Wright
Clyde S. Z. Zaidins*
Carl R. Zeisse*
Walter B. Zimmerman
John W. Zwart*
Earl Zwicker

LYNE STARLING TRIMBLE SCIENCE HERITAGE PUBLIC LECTURE SERIES

The Lyne Starling Trimble Science Heritage Public Lecture Series features prominent science historians and writers who highlight the important roles that science plays in modern society and culture.

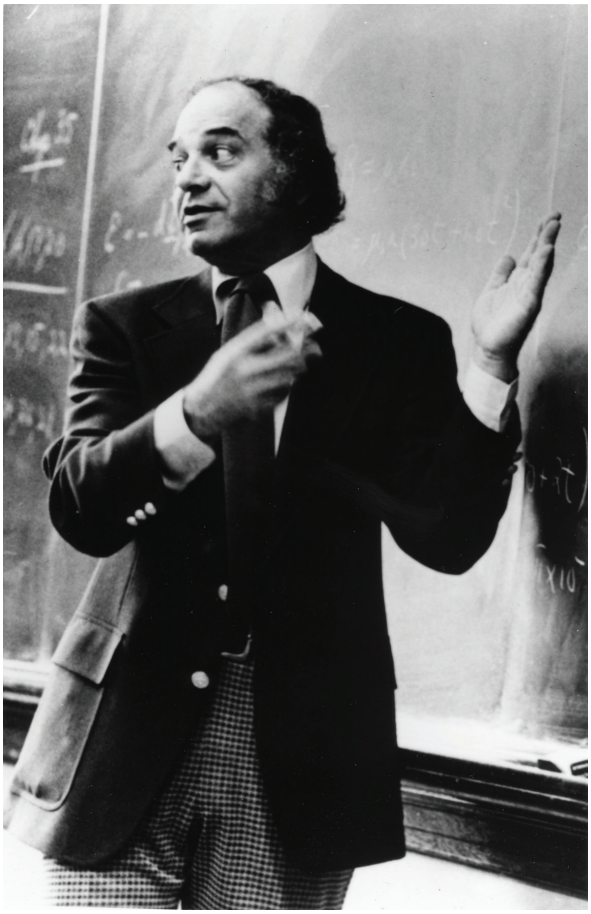
Check out the lecture series at:
www.aip.org/trimble-lectures

MYSTERY PHOTOS

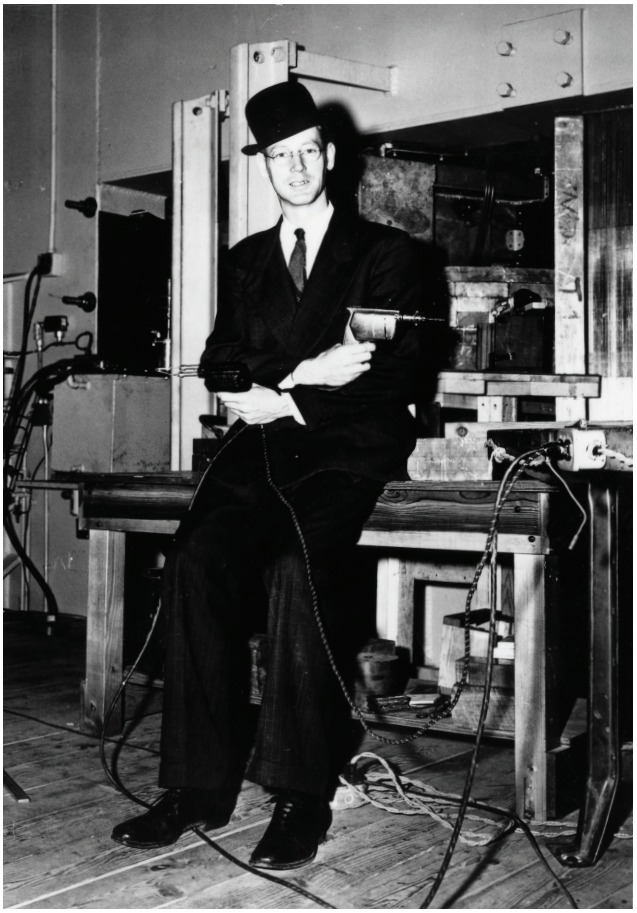
By Sean McEnroe, Photograph Collections Assistant

At Emilio Segrè Visual Archives we have a small box of photographs without identifying information, i.e. nothing written on the back, which we call the box of mysteries. We thought it would be a fun exercise to reach out to see if any of our readers recognize the people or places in the photos.

If you recognize someone or something, please contact Sean McEnroe:
Email: smcenroe@aip.org
Telephone: 301-209-3160



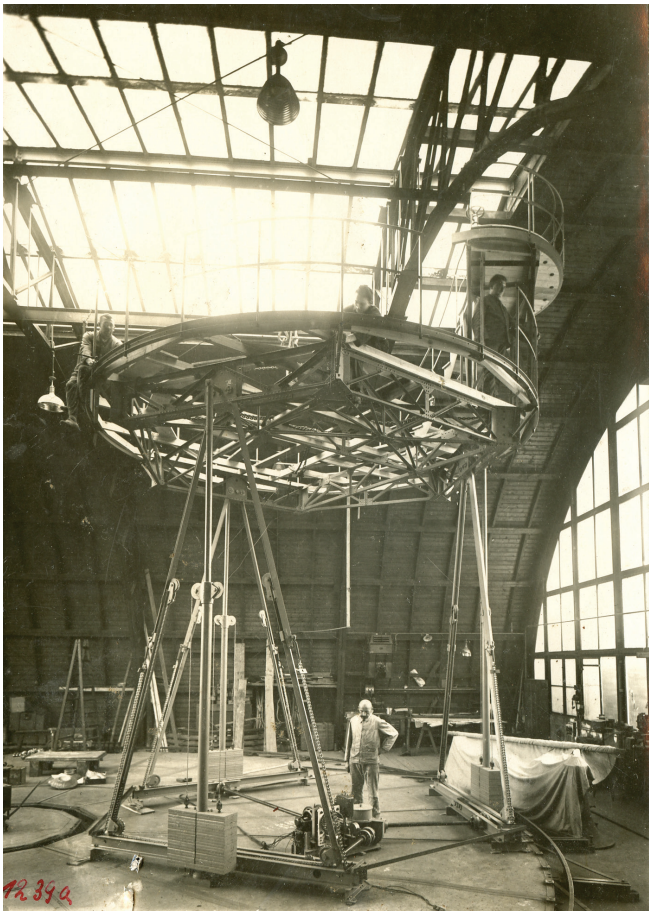
Unidentified man giving a lecture.



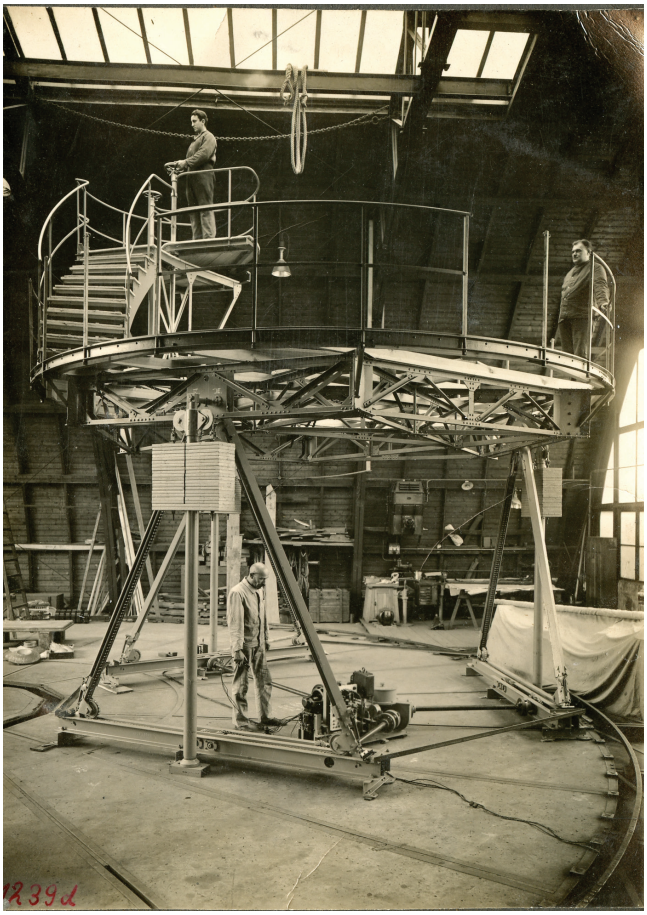
Who is this gentleman and what is he doing?

Who are the people and when was this photo taken? Quel mystère! The photo was taken in the Cour d'honneur in front of the chapel of the Sorbonne in Paris, France. The inscription, dated 1642 on the architrave, honors Cardinal Richelieu.

Here is a mystery gathering of well-dressed people. Note the table and sink in the foreground.



Does anyone recognize this building?

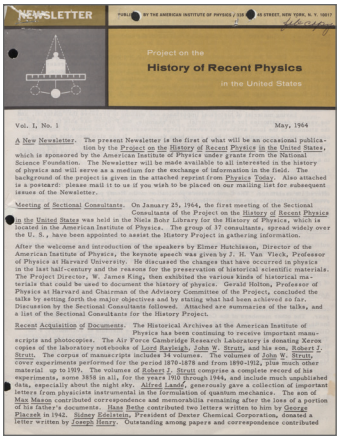


Another view of the building as seen n the left image.

CENTER FOR HISTORY OF PHYSICS
AMERICAN INSTITUTE OF PHYSICS
1 PHYSICS ELLIPSE
COLLEGE PARK, MD 20740

NONPROFIT ORG.
U.S. POSTAGE PAID
COLLEGE PARK, MD
PERMIT NO. 2321

A Look Back at the AIP History Newsletter


NEWSLETTER

Project on the
History of Recent Physics
in the United States

Vol. 1, No. 1 May, 1964

A New Newsletter. The present Newsletter is the first of what will be an occasional publication by the Project on the History of Recent Physics in the United States, which is sponsored by the American Institute of Physics under grants from the National Science Foundation. The Newsletter will be made available to all interested in the history of physics and will serve as a medium for the exchange of information in the field. The background of the project is given in the attached reprint from Physics Today. Also attached is a postcard: please mail it to us if you wish to be placed on our mailing list for subsequent issues of the Newsletter.

Meeting of Sectional Consultants. On January 25, 1964, the first meeting of the Sectional Consultants of the Project on the History of Recent Physics in the United States was held in the Niels Bohr Library for the History of Physics, which is located in the American Institute of Physics. The group of 37 consultants, spread widely over the U. S., have been appointed to assist the History Project in gathering information.

After the welcome and introduction of the speakers by Elmer Hutchisson, Director of the American Institute of Physics, the keynote speech was given by J. H. Van Vleck, Professor of Physics at Harvard University. He discussed the changes that have occurred in physics in the last half-century and the reasons for the preservation of historical scientific materials. The Project Director, W. James King, then exhibited the various kinds of historical materials that could be used to document the history of physics. Gerald Holton, Professor of Physics at Harvard and Chairman of the Advisory Committee of the Project, concluded the talks by setting forth the major objectives and by stating what had been achieved so far. Discussion by the Sectional Consultants followed. Attached are summaries of the talks, and a list of the Sectional Consultants for the History Project.

Recent Acquisition of Documents. The Historical Archives at the American Institute of Physics has been continuing to receive important manuscripts and photocopies. The Air Force Cambridge Research Laboratory is donating Xerox copies of the laboratory notebooks of Lord Rayleigh, John W. Strutt, and his son, Robert J. Strutt. The corpus of manuscripts includes 34 volumes. The volumes of John W. Strutt, cover experiments performed for the period 1870-1878 and from 1890-1916, plus much other material up to 1919. The volumes of Robert J. Strutt comprise a complete record of his experiments, some 3858 in all, for the years 1901 through 1944, and include much unpublished data, especially about the night sky. Alfred Landé, generously gave a collection of important letters from physicists instrumental in the formation of quantum mechanics. The son of Max Mason contributed correspondence and memorabilia remaining after the loss of a portion of his father's documents. Hans Bethe contributed two letters written to him by George Placzek in 1942. Sidney Edelstein, President of Dexter Chemical Corporation, donated a letter written by Joseph Henry. Outstanding among papers and correspondence contributed

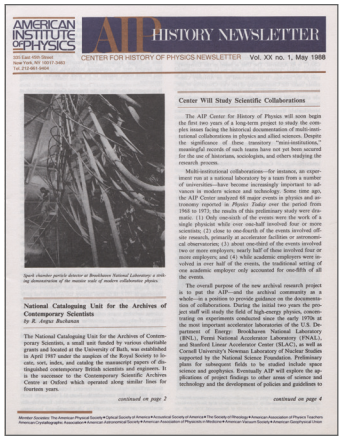
May 1964


AIP newsletter
CENTER FOR HISTORY OF PHYSICS
American Institute of Physics, 335 East 45 Street, New York, N.Y. 10017 (212) 685-1040

Physicists celebrate American Bicentennial

Center plans projects in American physics and in astrophysics

Spring 1976


AMERICAN INSTITUTE OF PHYSICS
AIP HISTORY NEWSLETTER
CENTER FOR HISTORY OF PHYSICS NEWSLETTER Vol. XX no. 1, May 1988

Center Will Study Scientific Collaborations

National Cataloguing Unit for the Archives of Contemporary Scientists

May 1988


AIP History Newsletter
CENTER FOR HISTORY OF PHYSICS & NIELS BOHR LIBRARY & ARCHIVES

Digitizing the Samuel Goudsmit Papers

In this issue...

Fall 2009

The newsletter was first printed in 1964 as a 1-2 page report about the current status of projects within the Center for History of Physics. Over the past 50 years it evolved into a 2-color spread format including photographs and articles by staff. Today, the newsletter features everything in full color, documentation preserved, and articles by researchers, guests, and staff.