Einstein Posts to the arXiv
By Bill Steele*

Cornell University’s arXiv e-print service on the Web is a place to find reports on the latest research almost as soon as it happens. But as television networks are fond of saying, if you haven’t seen it before, it is new, so it is appropriate that the arXiv now includes a previously obscure paper by a then up-and-coming young physicist named Albert Einstein.

The paper, “Theoretical Remark on the Superconductivity of Metals,” was written in 1922 for a symposium honoring Dutch scientist Kamerlingh Onnes, the discoverer of superconductivity, and published by the University of Leiden in the proceedings of the symposium. And there, apparently, it remained largely unnoticed until this year, when it was rediscovered by Neil Ashcroft, the Horace White Professor of Physics at Cornell, and translated from German into English by Björn Schmekel, then a Cornell graduate student and now a postdoctoral researcher at the University of California-Berkeley.

The paper contains nothing revolutionary from the point of view of today’s researchers in superconductivity, but it is, Ashcroft said, “a totally charming paper,” with significant insights for its time. Among other things, Ashcroft said, Einstein correctly predicted that a strong magnetic field would destroy superconductivity, something verified later by experiment.

“It’s just wonderful to know that the greatest scientist had an interest in this dramatic phenomenon,” added Ashcroft, whose own research partly deals with superconductivity in metallic hydrogen.

The paper was discovered through a series of serendipitous events. Some years ago Ashcroft happened to be visiting Leiden when a retiring professor was cleaning out his office. The professor was about to throw away his personal collection of the old Leiden Communications (a journal devoted mainly to low-temperature physics), but Ashcroft arranged to have the books shipped to Cornell. Reading through these books, Ashcroft found hints that the Einstein paper existed, and he asked Patricia Viele, physics and astronomy librarian at Cornell’s Edna McConnell Clark Physical Sciences Library, to try to locate it. Viele located it in a library in Europe. No English translation seemed to exist, so Ashcroft arranged for Schmekel to translate it. Schmekel then obtained permission from Leiden to copyright

(continued on page 3)

Improved Online Visual Archives
by Heather Lindsay: Photo Administrator/Associate Librarian

The AIP History Center’s Emilio Segrè Visual Archive (ESVA) went online in early 1999—a generation ago, as computer technology goes. Since then, our staff have made regular improvements in the interface while continually adding photographs. With more than 7000 images currently in its searchable database, the ESVA has become a powerful aid to anyone seeking visual materials on the history of physics, astronomy, geophysics and allied fields. We can now offer users the ability to download digital scans directly from the Web site, and process our service fees by credit card online. The improved efficiencies make savings that we can pass on to our customers: the ESVA, like all the Center’s services, is essentially not-for-profit. In fact, it operates at a loss, with the difference made up by donations from the Friends of the Center for History of Physics

(continued on page 2)
John Heilbron Recipient of Pais Prize

The 2006 Pais Prize for History of Physics, awarded jointly by the American Physical Society and the American Institute of Physics, has gone to John L. Heilbron, Professor Emeritus of History and History of Science at the University of California at Berkeley and a Member of the Modern History Faculty of the University of Oxford and Senior Research Fellow in the Oxford Museum for History of Science and Worcester College, Oxford. He receives this award “For his ground-breaking and broad historical studies, ranging from the use of renaissance churches for astronomy, through 17th and 18th century electrical science, to modern quantum mechanics.”

Heilbron was educated at the University of California at Berkeley, where he received A.B. and M.A. degrees in physics in 1955 and 1958 and a Ph.D. degree in history in 1964 under Thomas S. Kuhn. After a term as Assistant Director of the Sources for History of Quantum Physics Project, he began his academic career as an Assistant Professor of History at the University of Pennsylvania (1964-1967) and then returned to Berkeley, rising through the academic ranks to become Professor and Director of the Office for the History of Science and Technology in 1973; among his post-doctoral students there was Spencer Weart, current Director of the AIP Center for History of Physics. Heilbron became Class of 1936 Professor of History and History of Science in 1985, and Professor Emeritus in 1994. He also served as Vice Chancellor of the University of California at Berkeley from 1990 to 1994. Since 1996 he has been a Member of the Modern History Faculty of the University of Oxford and Senior Research Fellow in the Oxford Museum for History of Science and Worcester College, Oxford.

Heilbron’s publications on the history of physics have been groundbreaking and of astonishing breadth. As one writer said, “his major books deal with a stunning variety of subjects including electricity in the 17th and 18th centuries, Max Planck and his moral dilemmas, the use of churches in early modern Europe as solar observatories, the development of geometry, Henry Moseley, and Ernest Lawrence and his laboratory.” These works, and the large number of papers he has published, are uniformly of outstanding quality and display an ability to deal with the technical aspects of science as well as the social, political, and institutional contexts in which science has been pursued in the past. His book, “The Sun in the Church: Cathedrals as Solar Observatories,” (Harvard University Press, 1999), was awarded the Pfizer Prize of the History of Science Society, its highest book award, in 2001.

Simultaneously with producing this splendid body of work, Heilbron has enthusiastically and effectively taught many undergraduate and graduate courses and has directed a variety of doctoral dissertations. He also has edited, for the past 25 years, Historical Studies in the Physical Sciences (which he expanded in 1986 to include the biological sciences), one of the leading journals in the history of science. As an editor he has had an enormous and beneficial influence on work done in the history of physics, both because he has published only work that meets his own exacting standards, and because of his legendary critical and clarifying editorial comments and revisions of the papers he has published in this journal.

URL for this search is: http://arxiv.org/find/physics/1/au:+Einstein_A/0/1/0/all/0/1

Title: Theoretical remark on the superconductivity of metals. Authors: Albert Einstein Comments: Translation of Albert Einstein’s article “Theoretische Bemerkungen zur Supraleitung der Metalle”, Gedenkenboek aangeb. aan H. Kamerlingh Onnes, eaz. Leiden, E. IJdo, 1922 (page 435) Translated by Bjoern S. Schmekel with the courtesy of the Kamerlingh Onnes Laboratory, Leiden-Institute of Physics, Leiden University. Subject class: History of Physics; Superconductivity.

The arXiv e-print service, maintained by Cornell University, is a repository where physicists, mathematicians, astronomers and some biologists post reports of their research as soon as they are available, in advance of publication in professional journals. *Reprinted from the Cornell Chronicle, November 2005. Copyright © 2005 Cornell University, used by permission.*
and the ESVA’s Endowment Fund, established by Rosa Segrè in honor of her late husband, the noted physicist, historian of physics, and amateur photographer Emilio Segrè.

The initial ESVA Web site was designed so that researchers could look up photographs using name and/or keyword, and then submit an order for a reproduction by contacting the ESVA staff. An online form provided a quick way to send the staff an order by e-mail. The Web forms that the staff used to enter photo data and upload photos to the Web site were accessible only to AIP’s information technology staff, so making changes was a lengthy process. The database for photo orders was separately maintained, generating an invoice which was then sent to the accounting department, who entered it into yet another system. Thus every photograph had to be cataloged twice, once in the online database viewed by customers and once in the photo-orders database. Orders were also entered twice, once in the photo-orders database and once in the accounting system. As usual with such patched-together systems, staff could not maintain complete consistency among all the data entries.

In 2001 the online catalog began to malfunction due to a server “upgrade.” Meanwhile AIP decided to develop a broad e-commerce initiative for all its work, and chose an Oracle database system with an online “Store” interface. The ESVA was chosen as a pilot project, due to the complicated nature of the data and the variety of transactions involved. AIP’s technical staff felt that if Oracle could handle the ESVA, it could easily handle AIP’s other products.

Unfortunately, we eventually realized that the Oracle implementation could not handle the ESVA well (nor even some simpler tasks). The online store functioned, but it required frequent personal help for order problems and other troubleshooting. The online store ended up duplicating the same unwieldy system as before; we were still cataloging photos in two databases and entering orders in two different systems.

Toward the end of 2004, AIP realized that the Oracle online store system was not working and was too expensive to maintain. Management elected to try a new online e-commerce system employing open source software, called Merchantspace (now ElasticPath). Once again, the ESVA was chosen as the test case. This new store system, while unable to function as a database for the photo data, could interface easily with standard Microsoft SQL Server database software.

The Microsoft SQL Server database is basically a more robust version of MS Access software, which we were already using for our photo-order database, so we seized upon the chance to finally merge all of the photo data into one database.

After time-consuming detailed data cleanup we were able to complete the merger. As an added bonus, we can now directly access all the data ourselves, so we can update and change any aspect of it as needed. With complete integration, the orders go directly from the users to our accounting department, cutting out entry duplication.

Meanwhile, with extensive help from AIP’s technical staff, we completely redesigned and streamlined the ESVA Web site’s interface with users. Rather than describe it here, we urge you to take a look at http://photos.aip.org/. We would welcome your comments. We have found that for some users, the search facility is not intuitively easy, and we will continue to troubleshoot and upgrade the online interface as we receive feedback.
The Archives for the History of the Max Planck Society

By Marion Kazemi, Archiv Zur Geschichte der Max-Planck-Gesellschaft

The Max Planck Society for the Advancement of Science (MPS) is probably one of the most well known German scientific research organizations. It promotes basic research in the natural sciences, life sciences, social sciences, and the humanities, primarily in its own 78 institutes.

The Archives for the History of the Max Planck Society started their work thirty years ago in the former Kaiser Wilhelm/Max Planck Institute (KWI/MPI) for Cell Physiology in Berlin-Dahlem, which was part of West Berlin at the time. Five years ago, the Archives were extended through the utilization of additional storage space in the former accelerator tower of the KWI for Physics next door.

The main aims of the Archives are the preservation of documents of historic interest for the Max Planck Society for the Advancement of Science (founded in 1948) and for its predecessor organization, the Kaiser Wilhelm Society (founded in 1911) as well as making such documents available for research (currently approx. 3.5 shelf kilometers).

Documents include records from the Administrative Headquarters and the governing bodies of the Society, as well as those from the institutes, individual departments, research units and working groups. Another major focus of the Archives is on preserving the personal papers of outstanding personalities who were once active with the Kaiser Wilhelm or Max Planck Society, among them several Nobel laureates. We also keep the building plans and drawings of the institutes. These holdings are complemented by a number of person- or subject-related collections, autographs, manuscripts, certificates, prize medals, a major collection of audiovisual materials (about 70,000 photographs as well as films and tapes), as well as museum pieces and additional documentation material related to the history of the Max Planck Society and its members, such as collections of news-paper cuttings and so-called grey literature.

While the Administrative Headquarters and the Society’s bodies turn over those of their records which they no longer need; institutes, individual departments, research units or working groups generally do not make their records available to the Archives until their closure. On the deaths of directors or Scientific Members of the Max Planck Society, the Archives enquire with the families and institutes if they can obtain the personal papers. In most cases there are no problems in acquiring such papers, sometimes as a deposit rather than a gift. In the past few years we have often successfully contacted Scientific Members before their retirement to enquire if they wish to entrust their papers to the Archives during their lifetime. Today, we keep the papers of 220 people in our Archives, of which more than a quarter are still alive. Among them we keep those of 11 Nobel Laureates, including Walther Bothe, Peter Debye, Otto Hahn, Max von Laue, Ernst Ruska, and collections of Albert Einstein and Max Planck, whose papers were destroyed in World War II.

The records of the institutes and Administrative Headquarters are available to historians thirty years after their initial inclusion, with the exception of personnel files. Access to personal archives is restricted until thirty years after the death of the individual unless otherwise agreed on during their lifetime. To access the papers of living scientists, the latters’ permission is required.

Most of the holdings relevant to the history of physics and related disciplines are kept in the personal archives, but there are also records of some individual institutes that should be of interest. It should be noted that most of the institutes carry out interdisciplinary research, i.e. chemical institutes often have physics departments or physicists working there. One of the most important institutes is the KWI for Physics, whose first director—until his emigration to the United States in 1932—was none other than Albert Einstein, followed by Peter Debye and Werner Heisenberg; Max von Laue was deputy director. The Archives keep a small autograph collection of Albert Einstein as well as the office papers of Debye and von Laue. While the records of the MPI for Physics (as well as for the MPI for Astrophysics/ MPI for Extraterrestrial Physics originating from it) are not yet in the Archives, we possess the personal papers of the directors and Scientific Members Ludwig Biermann, Gerd
The MPG Archives Web site: www.archiv-berlin.mpg.de. (The Web site is now also available in English.) Or contact Dr. Marion Kazemi, at e-mail: kazemi@archiv-berlin.mpg.de.

Jet Propulsion Laboratory (JPL) the Lead NASA Center for Robotic Exploration
by Margo E. Young

The Jet Propulsion Laboratory (JPL) is a federally funded research and development facility managed by the California Institute of Technology (Caltech) for National Aeronautics and Space Administration (NASA). JPL is justly famed as the lead NASA center for robotic exploration of the solar system, and its archives contain a wide range of materials useful to historians of the space sciences and allied fields.

JPL began as an off-shoot of Caltech’s GALECIT (Guggenheim Aeronautical Laboratory) and did work for the Army, beginning with jet-assisted take-off rockets and moving on to aerodynamics and propellant chemistry, resulting in the Corporal missile. JPL built and operated Explorer 1, the first satellite launched by the United States. JPL designed and built the satellite in less than three months. The primary science instrument on Explorer 1 was a cosmic ray detector, which led to the discovery of the Van Allen Belts.

Shortly after NASA was created in 1958, JPL was transferred to the new agency. JPL was involved in lunar exploration almost immediately with the Ranger and Surveyor missions to the moon. Surveyor 3 carried an electromechanical scoop device with which scientists were able to dig four trenches by remote control, scoop up samples of lunar soil, perform eight static bearing tests by pressing the scoop against the lunar surface, and 14 impact tests. These tests confirmed (contrary to what some scientists had feared) that the lunar surface could support a landing craft and that astronauts would be able to walk on the Moon. The JPL Archives has a collection of project documents and images from Surveyor.

America’s first successful planetary mission, Mariner 1962 to Venus, was also a JPL mission. Later Mariners included Mariner Mars 1969 with two spacecraft (Mariner 6 and 7) designed to fly by Mars, analyze the atmosphere and surface with remote sensors, and take pictures of the equator and south pole of the planet. Archival collections include the Spacecraft Design Book and the Status Bulletins form the Mariner missions.
The JPL Archives has records from many other projects: Viking orbiters to Mars (1975); Voyager twin spacecraft (1977) visited Jupiter, Saturn while Voyager 2 went on to Uranus and Neptune; Magellan to Venus (1989); Galileo to Jupiter (1989); Ulysses (1999) to study the sun’s poles, and Mars Pathfinder (1997) whose rover, Sojourner, roved Mars for almost 3 months. The JPL Archives also has project collections for some of JPL’s failed missions: Mars Observer (lost in 1993) and Mars Climate Orbiter (1999).

In addition to collections of project documents, the JPL Archives has collections relating to the administrative history of JPL, extensive image collections, and over 100 oral histories. Cargill Hall, JPL’s first historian, began the History Collection now in the Archives. Within this collection are materials on Army Ordnance projects such as Corporal and Sergeant; NASA flight projects, including Ranger, Surveyor, and Mariner; other JPL activities; and material generated by organizations other than JPL but relevant to JPL’s activities.

The JPL Archives was established by Michael Q. Hooks in 1989 with the mission of documenting the history of the Laboratory’s flight projects, research and development activities, and administrative operations. The primary holdings are listed on the BEACON Archives Web site at http://beacon.jpl.nasa.gov. The Web site also features the Archives’ Historical Photo of the Month, from which the image accompanying this article was selected.

In the past two years, the JPL Archives has been revamping its approach to processing in order to make more of its materials accessible. High priority accessions are listed in the online, publicly accessible catalog and include contents lists as provided by the donor. Catalyzed by the Greene and Meissner article in American Archivist in 2005, our processing approach will continue to evolve.

For more information, contact Margo E. Young, NASA, e-mail: margo.e.young@jpl.nasa.gov.

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Recent Publications of Interest
Compiled by Babak Ashrafi

This is our usual compilation of some (by no means all) recently published articles on the history of modern physics, astronomy, geophysics and allied fields. Note that these bibliographies have been posted on our Web site since 1994, and you can search the full text of all of them (along with our annual book bibliography, recent Catalog of Sources entries, exhibit materials, etc.) by using the “Search” icon on our site map: www.aip.org/history/s-indx.htm

To restrict your search to the bibliographies, enter in the box: [YOUR SEARCH TERM(S)] AND “RECENT PUBLICATIONS”

Stephen Cole’s “Weather on Demand” in the Fall 2005 issue of American Heritage of Invention and Technology is about controlling weather from Langmuir to the present.

The American Journal of Physics has several interesting articles including Jeremy Bernstein’s “Max Born and the Quantum Theory” and Frieda A. Stahl’s “Frances Whiting: A Foremother of American Women Physicists” in Issue 11 of Vol. 73, November 2005. Issue 2 of Vol. 74 contains an erratum to Bernstein’s article on Born as well as Jay M. Pasachoff’s discussion of “Student Knowledge of Physics History,” J. H. Hannay’s “Carnot and the Fields Formulation of Elementary Thermodynamics” about the original formulation of thermodynamics, and Ralph Baierlein’s article, “Two Myths about Special Relativity,” about Einstein’s use of the phrase “the constancy of the speed of light.”


Unexpected developments beginning with cosmic ray experiments of the 1940’s and 50’s are the topic of “From Pions to Proton Decay: Tales of the Unexpected,” by D.H. Perkins, in Annual Review of Nuclear and Particle Science, Vol. 55.


“Lessons Lost” is the depressing title of Joseph Cirincione’s article in Vol. 61, No. 6 of the Bulletin of the Atomic Scientists, about 60 years of attempts to contain the nuclear threat.

in his Correspondence with Ernst Mach.” Issue 4, has Jaume Navarro’s “J. J. Thomson on the Nature of Matter: Corpuscles and the Continuum.”


Lynn Yarris recounts “Fifty Years of Antiprotons” in the November 2005 issue of the CERN Courier.


V. B. Braginsky writes about “Geometry and Physics after 100 Years of Einstein’s Relativity,” which was a meeting held in Germany in April 2005, in Vol. 48, No. 6 of Physics-Uspekhi. G. E. Gorelik writes about “Matvei Bronstein and Quantum Gravity: 70th Anniversary of the Unsolved Problem,” in No. 10 of the same volume. No. 11 contains “One Hundred Years of the Photon,” by V. P. Milant’ev, and G. A. Goncharov celebrates the first Soviet two-stage thermonuclear charge in “The Extraordinarily Beautiful Physical Principle of Thermonuclear Charge Design.” No. 12 contains more about the history of Soviet nuclear weapons in “Moscow State University Physics Alumni and the Soviet Atomic Project,” by G. V. Kiselev, as well as “Prout’s Law” and the Discovery of Argon,” by A. A. Matsyshel.

Nobody could think of extemporizing lessons on, say, Greek history or the history of German literature, but one finds it quite natural that a professor of mathematics for instance, starts a series of lectures on the history of mathematics without any serious preparation. This is another proof of the low esteem in which History of Science is held.

—George Sarton, 1916


Chunglin Kwa examines the impact of the interdisciplinary cooperation in “Local Ecologies and Global Science Discourses and Strategies of the International Geosphere-Biosphere Programme,” in Vol. 35, No. 6 of Social Studies of Science.


Documentation Preserved

Compiled by Jennifer S. Sullivan

All the information here is entered in our online International Catalog of Sources for History of Physics and Allied Sciences. PLEASE NOTE: This column is published in its full extended form, as in previous years, as part of our online newsletter. Please see the latest issue online at www.aip.org/history/web-news.htm.

Amherst College, Robert Frost Library, Special Collections Department and College Archives. Amherst, MA 01002, USA


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


Churchill College. Archives Centre. Cambridge CB3 OD5, England, UK


Archiv zur Geschichte der Max-Planck-Gesellschaft. Boltzmannstrasse 14, D-14195 Berlin-Dahlem, Germany


Historians of science often point with pride to the rapid growth of our field during the last three decades. We must not conceal from ourselves, however, that, relative to the vast intellectual terrain for which we hold scholarly responsibility, we remain thinly scattered settlers. We have established a few well-populated strongholds, beyond which we can claim only widely dispersed frontier outposts.

—Frederick L. Holmes
mission to quote or cite required from CalTech.


**Gerald Wasserburg** Papers. Size: 100 linear feet. Restrictions: Collection is partially processed.


**Binghamton University. University Libraries. Special Collections and Archives.** P. O. Box 6012, Vestal Parkway East, Binghamton, New York 13902-6012, USA.


**Boston University Howard Gotlieb Archival Research Center** 771 Commonwealth Ave., 5th Floor Boston, MA 02215 USA.


**Milic Capek** Collection. Collection Dates: 1938-1983. Size: 0.5 linear feet.


**Chemical Heritage Foundation Roy Eddleman Institute for Interpretation and Outreach** 315 Chestnut Street Philadelphia, PA 19106 USA.

**Robert G. Parr** Papers. Collection Dates: 1941-2003. Size: 69 linear feet. Restrictions: A limited number of files are restricted due to their confidential academic nature—these files are noted as such in the finding aid.


**DePauw University. Archives of DePauw University and Indiana United Methodism. Roy O. West Library.** Greencastle, IN 46135 USA.


**Case Western Reserve University Kelvin Smith Library. Special Collections** 11055 Euclid Avenue, Cleveland, Ohio 44106 USA.


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


**Clemson University. Libraries. Special Collections. Senator Strom Thurmond Institute Building.** Clemson SC 29634-3001 USA.


**Library of Congress. Manuscript Division. James Madison Memorial Building, First Street and Independence Avenue, S. E., Washington, DC 20540 USA.**


**John Mohler** Correspondence. Collection Dates: 1892-1907. Size: 9 items.
COMING SOON...a web exhibit on the history of early cosmology. To find out when it goes online, sign up for our e-mail list: www.aip.org/history/newsletter/newsletter-request.htm. Contact us at 301-209-3165, or e-mail: chp@aip.org.

Fred Hoyle lecturing at Rice University, March 1975. Photo courtesy AIP Emilio Segré Visual Archives, Clayton Collection.

Albert Einstein Collection. Collection Dates: 1896-1955. Size: 42.5 linear feet. Restrictions: No photocopying of any material from the Hebrew University section is permitted without the express written permission of Hebrew University. In addition, each user of the Hebrew University copies must complete a user form provided by Hebrew University before gaining access to those papers.

Dudley Observatory. Collections. 107 Nott Terrace, Schenectady, NY 12308 USA.


Iowa State University. Parks Library. Ames, IA 50011 USA.


Florida State University. Paul A. M. Dirac Science Library. Tallahassee, FL 32306 USA.

Papers of P.A.M. Dirac. Collection dates: 1888-1999. Size: 190 linear feet. Restrictions: Two small groups of documents are restricted; until declassification of some World War II era papers occurs, they cannot be made available.

Harvard University Archives. Pusey Library. Cambridge, MA 02138 USA.
Mystery Photo

This mystery photo was miss-identified in our collection as Jean Bernard Leon Foucault. It was donated to us by E. Scott Barr, and he obtained it from the Smithsonian Institution. Can you identify who is in the photo?

If so, please let us know: send e-mail to photos@aip.org, call 301-209-3184, or write AIP History Center, One Physics Ellipse, College Park, MD 20740.

Thank you for your help!

Records of the Department of Astronomy. Collection dates: Circa 1891-2006. Size: unknown. Restrictions: Restricted to use by the department of origin for 25 years from date of creation; permission required from representative of department of origin.


National Institute of Standards and Technology, NIST Archives. Information Services Division. 100 Bureau Drive, MS 2500, Gaithersburg, MD 20899 USA.


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


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


Smith College Archives. North Hampton, MA 01063 USA.


University of Alaska. Alaska and Polar Regions Collections. Fairbanks, AK 99775 USA.


University of Arizona Library. Special Collections. 1510 E. University, Tucson, AZ 85720-0055 USA.

Papers of Edwin Francis Carpenter. Collection dates: Size: 2.5 linear feet.


University of Chicago. The Joseph Regenstein Library. Department of Special Collections. 1100 East 57th Street, Chicago, IL 60637 USA.


University of North Carolina at Chapel Hill Library. Manuscripts Department. Southern Historical Collection. Wilson Library CB# 3926, Chapel Hill, NC 27599-3926 USA.


University of Texas at Austin. Center for American History. University Archives. Faculty Papers Collection. Austin, TX 78713 USA.


Francis Eugene Nipher


Historical materials can be useful, even indispensable, in science education provided—and this is a major qualification—that they are used to inculcate science, not history of sociology.

— John Heilbron (“History as a Collaborator of Science”)
Friends of the Center for History of Physics

Needed: $240,000 to Complete History That Matters Campaign

By definition, important archival work like that of the AIP History Center should be maintained in perpetuity, and that requires adequate annual funding. The revolutionary work of physicists and other scientists in our times is bound to be of interest to people for centuries to come. The research itself will continue, and the responsibility to preserve its history and make it known likewise will not end.

Moreover, the Center’s challenges keep multiplying with the adoption of newer communication and data storage methods, and the approaching end of the first flowering of modern physics – a century in which the number of graduates rose by orders of magnitude. Each year we mark the passing of familiar names who opened up entirely new branches of physics and allied sciences. The Center must increase both the scope and intensity of its activities to meet these new challenges while maintaining its responsibilities. This will require a healthy endowment of at least $40 million.

The Friends of the Center, not daunted by this ambitious long-term goal, are very close to completing the first phase of their plan: the campaign, “History That Matters,” aimed to raise the Endowment from $5 million to $8 million. Now we need your help to close the last gap of $240,000 in this critical campaign to build for our future. Whether you’re a member of the Friends of the Center or a new donor, please make a contribution now or contact us to set up a challenge grant or pledge a multi-year gift.

Call 301-209-3006 or e-mail the Center at historyfriends@aip.org.

2005 Annual Fund

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 have contributed in 2005 to the Center for History of Physics. Leaders contributed $5,000 or more; Benefactors contributed $2,500 to $4,999; Patrons contributed $1,000 to $2,499; Sponsors contributed $500 to $999; Colleagues contributed $250 to $499; Associates contributed $100 to $249; and Members up to $99. Bookplate Donations honor or memorialize a colleague while supporting the purchase or conservation of rare books.

Friends-in-Deed donated books, materials, or other services. ★ 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 historyfriends@aip.org, or visit our Web page at www.aip.org/history/friends.htm.

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A Prize Gift to the Center's Endowment

Last year, Mildred Dresselhaus, first woman Chair of the American Institute of Physics’, Governing Board and member of the Friends of the Center for History of Physics Development Committee, received the 11th Heinz Award for Technology, the Economy and Employment. The prize commended her for a body of scientific scholarship that has advanced the world’s understanding of the multi-faceted field of carbon science, and blazed a trail of opportunity and inspiration for women in science.

In recognition of the value and quality of the work conducted by Center for History of Physics, Millie designated a share of the prize money to go towards our endowment.

“Throughout her career, Dr. Mildred Dresselhaus has combined significant scientific accomplishments and prominent leadership roles with an abiding commitment to support the advancement of women in the sciences,” said Teresa Heinz Kerry, chairman of the Heinz Family Foundation.
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