

Digitizing the Samuel Goudsmit Papers

In the Fall 2008 issue of the Newsletter we reported that the Library & Archives had received a grant from the National Historical Publications and Records Commission (NHPRC) to scan and mount online the complete papers of Samuel A. Goudsmit, consisting of an estimated 66,000 individual items.

We promised that we'd keep you updated, and we're pleased to report that the entire collection has been prepared for shipment to the imaging vendor, Macfadden & Associates; the first 12 boxes of the collection have been scanned; and staff are beginning to review the scanned images.

Creating an archival-quality digital facsimile of the Goudsmit Papers requires painstaking and time consuming work. The project's assistant director, Melanie Brown, and the project assistant, Rebecca Bruner, prepared the collection by inspecting each sheet of paper for damage and removing all staples or

other fasteners. Where necessary they replaced the fasteners with strips of acid-free paper, and they flattened folded edges and crumpled corners.

The prepared documents are being transported in small batches to Macfadden & Associates in nearby Silver Spring,

for each image, resulting in a more readable digital representation.

As the vendor returns the scanned documents, the next and most important phase of the project begins—review of each page. Melanie and Rebecca compare each scanned image with its original document, verifying that the correct image has been scanned, the image is oriented properly, and the contrast is light or dark enough to read penciled annotations and fading carbon sheets. If an image does not meet these and other archival specifications, it's returned to the vendor to be rescanned.

With the help of AIP Web Development staff, we are beginning to explore the next stage of the project: designing the storage system and online interface for displaying the digitized collection. We're expecting exciting results and will continue to keep you updated. ■



MD. Since the Goudsmit Papers are irreplaceable, the scanning technicians cannot use a document feeder. Instead, each piece of paper is placed onto a flat-bed scanner by hand. The slower pace and individual attention also allows the technician to adjust the contrast levels

In this issue...

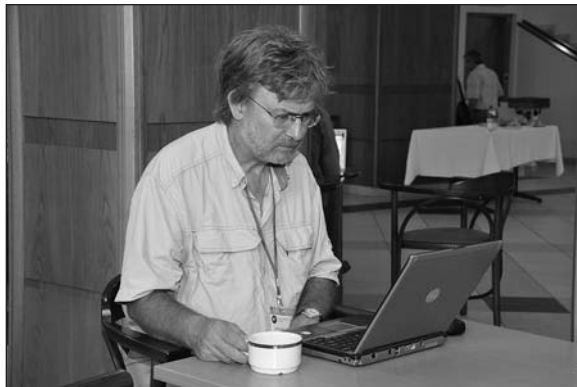
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Cover Photo:

Lt. Toepel and Samuel Goudsmit driving a jeep in Stadtilm, Germany; Alsos Mission, April 16, 1945. Courtesy AIP Emilio Segrè Visual Archives.

Thinking Like a Center for History of Physics

By Greg Good, Center Director



Greg Good

AIP's Niels Bohr Library & Archives preserves the heritage of the physical sciences, while the purpose of the Center for History of Physics is to make this heritage known. This year the Center includes Will Thomas, Ph.D.—a historian of science who studied at Harvard—here on the third year of a post-doctoral position, Orv Butler, Ph.D.—associate historian who worked with Joe Anderson on the History of Physicists in Industry (HoPI) project and who with Joe is now starting the three-year History of Physicist Entrepreneurs (HoPE) project, Ada Uzoma—who designs and builds the new elements of our web presence, Stephanie Jankowski—who manages the office and especially keeps the oral history program on track, and me.

Of course, the separation of activity is not that simple. All of us work constantly back and forth, as do Joe Anderson and the Library staff. I help the Library in selecting books that will fill the needs of researchers. Joe keeps me in tune with our collections policies for manuscripts, policies that have worked well for decades. Ada and Steph work with Library staff to place their resources effectively on the web and to keep projects flowing.

Will's "Array of Contemporary American Physicists" project will ultimately become a web-based research tool that complements our Emilio Segrè Visual Archives, the International Catalog of Sources and the on-line Physics History Finding Aids. The Library & Archives also undertake research related to archival issues—documentation research—such as that on physicist entrepreneurs and their records.

So there is no black-and-white separation of functions between the Center and the Library & Archives. There are, however, some things that the Center focuses on that stand apart. While the Library & Archives maintains the standards and goals of a 21st-century digital repository, including clarity on scope of collections, preservation requirements, and cataloging and data standards,

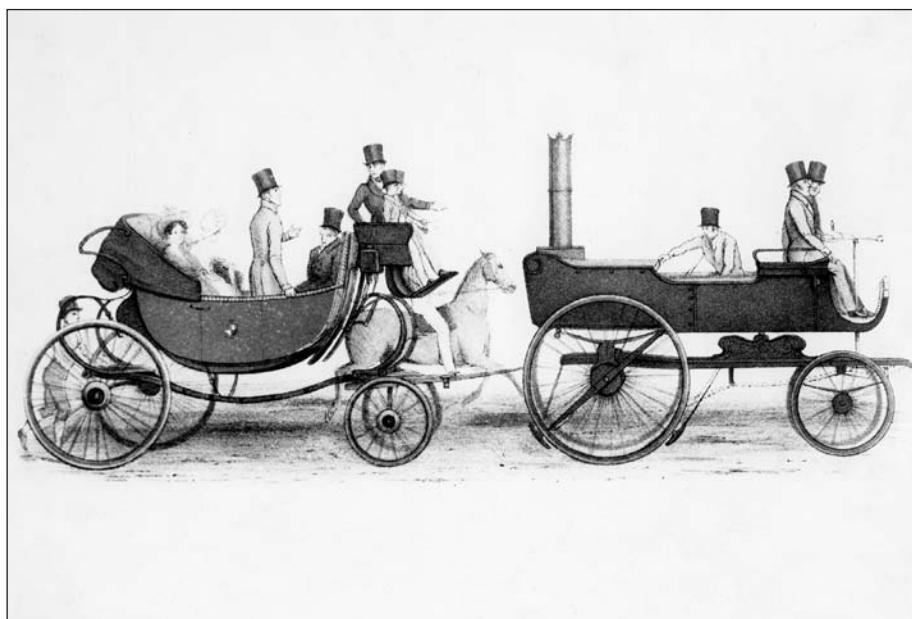
the Center should keep the active creation and propagation of history of physics and allied sciences foremost.

That is, the Center should provide a place where historians, scientists, and other scholars gather to talk about "the next new thing" in history of the physical sciences, broadly conceived, as well as to do research in our extraordinarily rich collections. It should encourage new scholarship, new areas of investigation, new questions. The Grants-in-Aid program does this and, as the economy recovers, will do more of this. Even before the recovery, though, in tough times with a tightened budget, the Center has allocated 50% more for 2010 to the Grants-in-Aid program so that we can bring more scholars to College Park.

History of physics and allied sciences—it's the phrase the Center and the Library have long used to declare our subject. This includes classical physics, quantum and relativistic physics, astrophysics, astronomy, physics in medicine, industrial physics, geophysics, and many more areas. We need to encourage all of these areas of research among younger historians of science.

Given the rise in prominence of biomedical topics—among historians as among the general society—we must be proactive or levels of interest in history of the physical sciences will not be sustained. I think it is critical that historians of the physical sciences revive a graduate student conference inclusive of all of these topic areas and more at the earliest possible date. I gladly volunteer to coordinate this conference. I need half a dozen colleagues—including graduate students—to help. Will you join me?

The Center also should work to bring the history of the physical sciences to the broadest audience possible. Our web exhibits on Einstein, Curie, the history of scientific cosmology, etc., were conceived for this sort of educational outreach. We will continue to add to these, with Spencer Weart's new exhibit on the history of the laser and an exhibit



The first practical steam carriage to ply along English roads between Bath and London circa 1829. Physicist John Herapath is up front. Credit: AIP Emilio Segrè Visual Archives, Physics Today Collection.

on “Physics at the Edge of Space: Early Exploration of the Magnetosphere”, both going live in 2010.

More can be done in educational outreach. This summer the Center shared in supporting an undergraduate intern, Mary Mills (B.S., Wooster College, 2009), who conducted background research for the “Edge of Space” exhibit. She also shared her perspective as a physics-education major. More interns will follow in Mary’s footsteps each summer. The Center also started participating in the informal “Physics Education Roundtable,” which brings together educational staff of the American Institute of Physics, the American Physical Society, the American Association of Physics Teachers, and other member societies. Historians and science-educators need to communicate better everywhere.

For an academic historian like me who has spent his career teaching in a university history department, this brings new questions forward. The interests and needs of scientists, educators, and historians don’t always match, but there is considerable opportunity to collaborate. A simple example: I learned from Bo Hammer (AAPT) and Bruce Mason (APS ComPADRE project) that teachers of introductory physics courses, who cannot get very far into 20th-century physics, could use more historical web exhibits on earlier topics.

What did Galileo, Newton, Laplace, and Gauss (for example) research in mechanics? Cavendish, Coulomb, Faraday, Oersted, and Ampere in electricity and magnetism? Huygens, Young, Fresnel, and Biot in light? Maxwell, Hertz, and Helmholtz in electromagnetic theory



Rebecca Bruner (front) and Melanie Brown compare Samuel Goudsmit’s original notes for a review of Robert Jungk’s book *Heiler als Tausend Sonnen* (Brighter Than A Thousand Suns) with the digital facsimile.

and experiment? The Center can certainly begin working toward helping science students and teachers in these directions. Of course this will take time; the current exhibits were developed over 25 or more years. This will require sustained collaboration.

One of the ways to promote the broadest public awareness of the history of the physical sciences is well illustrated by two recent Grants-in-Aid. Peter Byrne reports in this newsletter on how he turned a Grant-in-Aid into a BBC-NOVA biographical film on the physicist who introduced the idea of infinitely many universes, Hugh Everett III. We have also supported the science writer Amir Aczel, well known for his books *Pendulum: Leon Foucault and the Triumph*

of Science, God’s Equation: Einstein, Relativity, and the Expanding Universe, Uranium Wars: The Scientific Rivalry that Created the Nuclear Age, Entanglement, and more. But of course, we are also glad to support scholars whose writings may never reach as broad an audience, but whose careful work lays the basis for a deeper understanding of the history of physical science.

The Center for History of Physics and the Niels Bohr Library & Archives continue to work together and to be closely entwined. Our goals and our methods complement each other. Together the two have accomplished much in the past, and we will continue to “**preserve and make known the history of physics and allied sciences.**” ■



How do I find archival collections related to astrophysics?

Start at the main landing page (<http://www.aip.org/history>) for the Center for History of Physics and the Niels Bohr Library & Archives. In the navigation links on the left of the screen, click on International Archival Catalog (ICOS). If you search only on “astrophysics” this search returns 449 hits—way too many. Narrow down the search by choosing restrictions

(limits) in the middle of the page. Add the restriction “Archival Collections held at AIP”, for example. This identifies 26 collections at AIP, including manuscripts, oral history interviews, and autobiographical essays. Note that the other 423 collections identified for “astrophysics” are at OTHER institutions around the world. This catalog is immensely helpful for researchers trying to track down collections related to the physical sciences no matter where they are held. You don’t have to be in the Niels Bohr Library to use it. You can use this catalog anywhere you have web service.

Grants-in-Aid: The Life-blood of the Center for History of Physics

By Greg Good

One of the most important means of making the Center a real locus for new work in history of physics is our Grants-in-Aid program. This program has been used since the 1980s to help scholars conduct historical research. These are not large grants, but they often encourage the start-up of new projects that later gain larger grants from NSF or other agencies.

Most projects involve research at the Niels Bohr Library & Archives using manuscripts, books, biographical material, etc., or they involve the conduct-

ing of new oral history interviews with prominent physical scientists.

On this page and the next are three reports of research undertaken recently by recipients of Grants-in-Aid: two Ph.D. candidates and one science writer. The small grant to the science writer, Peter Byrne, ultimately turned into an article in *Scientific American* and a BBC/NOVA biographical feature!

We recently were pleased to read the following article by Tom Scheiding in

a prominent academic journal, which was researched in part at the Niels Bohr Library & Archives on a Grant-in-Aid.

Tom Scheiding, "Paying for Knowledge One Page at a Time: The Author Fee in Physics in Twentieth-Century America," *Historical Studies in the Natural Sciences*, 2009, 39:219–247.

We also list here the Grants-in-Aid awarded in the Spring 2009 round. We expect to see these awardees leverage this support into important scholarship, too.

Nuisance to Nemesis: Nuclear Fallout

By Mike Lehman

With financial and archival support from the Center for History of Physics, I visited the Niels Bohr Library & Archives' (NBLA) College Park facility in late June and early July 2009. This visit was made to conduct research at the Library & Archives in support of my doctoral dissertation, "Nuisance to Nemesis: Nuclear Fallout as a Secret, a Problem and a Limitation on the Arms Race, 1954–1964."



Mike Lehman with Toyin Okusaga in the background.

Before traveling to College Park, I found, printed and preliminarily evaluated a number of oral history transcripts available online through NBLA. Thus I anticipated that a number of other items I located in the index of the NBLA collections would provide insights into scientific support for and political controversy related to the U.S. nuclear intelligence program, arms control policy, and the role of fallout in shaping national security policy. On arriving, I was very effectively assisted by the NBLA staff, which ably and promptly retrieved the items of interest to me. The finding aids were especially helpful. All this made my visit productive, in spite of reports of an H1N1 virus outbreak in the on-site daycare and minor flooding due to a plumbing problem in the floor above the archive!

The information I sought and found falls into three broad categories. Most important were a series of oral history interviews conducted by Kai-Henrik Barth and others with Cold War era seismologists. These interviews explored the policy controversies that sprung from disputes over the capabilities of seismological monitoring systems necessary to enforce arms control agreements before and after the signing of the Limited Test Ban Treaty in 1963.

I also found interviews and other archival materials that addressed

the biophysics controversies over the risks posed by fallout, several reports that suggested I needed to explore further the role of the Atomic Energy Commission's Project Sunshine, and some reports issued by the Federal Radiation Council that supplement materials found in my earlier research on the FRC at the John F. Kennedy Archive. A key find for me was the Lauriston Taylor memoir in which he defended existing human radiation exposure standards, part of his life's work at the National Bureau of Standards, against what he felt were overly dramatized charges that these standards were inadequate to protect populations against exposure to radiation.

Other areas of scientific and political controversy of use were the abundant insights across a number of interviews into the charges against Robert Oppenheimer and the role of Edward Teller into the revocation of Oppenheimer's security clearance. I also found evidence of the role of transnational relationships between scientists during the Cold War that facilitated arms control through the medium of Pugwash conferences, among other insights into the social and cultural milieu within sciences in the postwar period.

I thank the Center for History of Physics and the Niels Bohr Library & Archives for supporting my Ph.D. research. ■

Mike Lehman,
University of Illinois, Urbana-Champaign

The Many Worlds of Hugh Everett III

By Peter Byrne

In 2004 the American Institute of Physics awarded me a \$1,500 grant in aid to support researching the life of Hugh Everett III. Thus began a five year journey that resulted in my writing a profile of Everett for *Scientific American* and then, a full length biography of him for Oxford University Press, *The Many Worlds of Hugh Everett III: Multiple Universes, Mutual Assured Destruction and the Meltdown of a Nuclear Family*, due to be published in March 2010. I also worked with the BBC and NOVA to produce a film on Everett, *Parallel Worlds, Parallel Lives*.

The Inter-disciplinarity of Solid State Physics

By Joe Martin

I am conducting research for my Ph.D. dissertation on the disciplinary development of American solid state physics. The American Physical Society created a Division of Solid State Physics in 1947, giving an institutional face to an informal network of physicists studying properties of solids.

This institutional development, which continued over the next few decades, belied the fields' complexity. The diverse range of subject matter it examined—everything from elasticity to electro-optical effects—led to substantial overlap with chemistry, metallurgy, and engineering.

This project examines these fields' contributions, alongside those from other areas of physics, as the solid state community matured. I've had my nose in the archives for just over three weeks, and have found the Niels Bohr Library's collection of oral histories, physicists' papers, and institutional records rich in relevant material.

Joe Martin, Ph.D. Candidate,
University of Minnesota

This year the National Science Foundation awarded myself and philosophy of science professor Jeffery A. Barrett of the University of California, Irvine a grant to support the publication of a compendium of Everett's papers (with commentary) by Princeton University Press. A website of Everett's work will accompany the book.

In the mid-1950s, Everett was a doctoral student in physics at Princeton University, studying quantum mechanics with Robert Dicke, Eugene Wigner, and John Wheeler. For his dissertation, Everett wrote a mathematical proof that there is an uncountable infinity of universes—each containing a different copy of every object and person. When the physics establishment initially rejected

his strange idea, he went to work for the Pentagon designing the nuclear targeting plan for World War Three. He died in 1982, just as his "Many Worlds" theory was starting to become popular. Today, it is considered to be one of the most important breakthroughs in the history of physics and the philosophy of science—not to mention science fiction!

Everett is a compelling biographical subject because he was the quintessentially amoral (and super smart) Cold War technocrat. In addition to inventing the "relative state formulation of quantum mechanics," he wrote a classic paper in the annals of game theory; he invented computer algorithms that revolutionized military and business operations

(Continued on page 8)



Joe Martin

Grants-in-Aid Awarded in Spring 2009

Mike Lehman, Ph.D. Candidate, University of Illinois at Urbana-Champaign. "Nuisance to Nemesis: Nuclear Fallout and Intelligence as Secrets, Problems, and Limitations on the Arms Race, 1954–1964." For research conducted at the Niels Bohr Library & Archives.

Dr. Maria Rentetzi, Assistant Professor, National Technical University of Athens, Greece. "The Greek-American Connection: Queen Frederika and Nuclear Research in Post-War Greece." To conduct an oral history interview.

Dr. Dean Rickles, ARC Australian Research Fellow, University of Sydney, Australia.

"The Development of Quantum Gravity." To conduct an oral history interview.

Indianara Lima Silva, Graduate Student, Universidade Federal da Bahia, Brazil. "Arthur H. Compton: From the Classical Approach of X-ray Scattering to the Proposal of a Non-Classical Effect." For research conducted at the Niels Bohr Library & Archives.

Dr. Zuoyue Wang, Hixon-Riggs Visiting Professor, Harvey Mudd College. "Atmospheric Physics and Global Change Research in China." To conduct oral history interviews with Chinese geophysicists and atmospheric physicists. ■

Recent Publications of Interest

Compiled by Will Thomas

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 index: www.aip.org/history/s-index.htm.

To restrict your search to the bibliographies, enter in the box: [your search term(s)] and “recent publications”

In **Physics in Perspective**, Vol. 11, No. 1, Robert Crease presents “The National Synchrotron Light Source, Part II: The Bakeout;” Laszlo Tisza reflects on his career in an interview with Andor Frenkel in “Adventures of a Theoretical Physicist, Part I: Europe;” and Roman Jackiw remembers, “Hans Bethe, My Teacher”. In No. 2, Tisza presents “Part II: America” of his “Adventures” interview; Gennady Gorelik presents, “The Paternity of the H-Bombs: Soviet-American Perspectives;” Walter Harrison presents a history of an early phase in the physics of semiconductors in “Finding the Energy Bands of Silicon;” while Paul Halpern offers a tour of the physics history of his city in “Philadelphia: Life, Liberty, and the Pursuit of Physics”.

Vol. 40, No. 2 of **Studies in History and Philosophy of Modern Physics** presents Stefano Osnaghi, Fábio Freitas, Olival Freire Jr., “The Origin of the Everettian Heresy;” Olivier Darrigol consolidates the gains of a decidedly complex historiography in “A Simplified Genesis of Quantum Mechanics;” while Harvey Brown, Wayne Myrvold, and Jos Uffink present “Boltzmann’s H-Theorem, Its Discontents, and the Birth of Statistical Mechanics.”

Vol. 40, No. 2 of **Studies in History and Philosophy of Science, Part A** offers Jan Frercks, Heiko Weber, and Gerhard Wiesenfeldt’s piece “Reception and Discovery: The Nature of Johann Wilhelm

Ritter’s Invisible Rays” on the discovery of ultraviolet radiation.

The last two issues of **Historical Studies in the Natural Sciences** (the former *Historical Studies in the Physical Sciences*) contain only one article on physics: Tom Scheiding, “Paying for Knowledge One Page at a Time: The Author Fee in Physics in Twentieth-Century America,” in Vol. 39, No. 2.

British Journal for the History of Science, Vol. 42, No. 2 contains “Some Reflections on Newton’s *Principia*,” by E. B. Davies; and “Einstein in Portugal: Eddington’s Expedition to Principe and the Reactions of Portuguese Astronomers (1917–1925)” by Elsa Mota, Paulo Crawford, and Ana Simões. No. 3 presents “Arthur Cowper Ranyard, *Knowledge* and the Reproduction of Astronomical Photographs in the Late Nineteenth-Century Periodical Press” by James Mussell.

Archive for History of Exact Sciences, Vol. 63, No. 3, features Martin Niss, “History of the Lenz-Ising Model, 1950–1965: From Irrelevance to Relevance;” and Nissan Zeldes, “Giulio Racah and Theoretical Physics in Jerusalem.”

Science in Context, Vol. 22, No. 2 features Lambert Williams and William Thomas, “The Epistemologies of Non-Forecasting Simulations, Part II: Cli-

mate, Chaos, Computing Style, and the Contextual Plasticity of Error,” which discusses the relationship between the development of computer models of physical phenomena and the growth of chaos studies. No. 3 is a special issue dedicated to “Science in the Mountains,” and has two articles on mountain-based observatories: Catherine Nisbett Becker’s “Professionals on the Peak;” and Stéphane Le Gars and David Aubin’s “The Elusive Placelessness of the Mont-Blanc Observatory (1893–1909): The Social Underpinnings of High-Altitude Observation.”

Centaurus, Vol. 51, No. 3 features Victor Bonifácio, Isabel Malaquias, and João Fernandes, “Taking Internal Advantage of External Events—Two Astronomical Examples From Nineteenth Century Portugal.”

Perspectives on Science, Vol. 17, No. 2 contains “Kepler’s *Optical Part of Astronomy* (1604): Introducing the Ecliptic Instrument” by Giora Hon and Yaakov Zik.

Annals of Science, Vol. 66, No. 2 presents Helge Kragh’s “The Solar Element: A Reconsideration of Helium’s Early History,” while No. 3 features Aitor Anduaga’s “Sydney Chapman and the Layering of the Atmosphere: Conceptual Unity and the Modelling of the Ionosphere;” Faidra Papanelopoulou’s “The International Association of Refrigeration through the Correspondence of Heike Kamerlingh Onnes and Charles-Édouard Guillaume, 1908–1914;” and Ja Hyon Ku’s “Uses and Forms of Instruments: Resonator and Tuning Fork in Rayleigh’s Acoustical Experiments.”

History of Science, Vol. 47, No. 3 presents Simon Schaffer, “Newton on the Beach: The Information Order of *Principia Mathematica*,” and Sofie Lachapelle, “Science on Stage: Amusing Physics and Scientific Wonder at the Nineteenth-Century French Theatre.”

“ I am among those who think that science has great beauty... A scientist in his laboratory is not only a technician but also a child placed in front of natural phenomena which impresses him like a fairy tale. ”

Marie Curie

Vol. 32, No. 2 of **Berichte zur Wissenschaftsgeschichte** contains “Gangarten des Rationalen. Zu den Zeitstrukturen der Quantenrevolution,” by Michael Stöltzner on the temporal aspects of the historiography of the quantum revolution.

In Vol. 63, No. 1 of **Notes and Records of the Royal Society**, A. James McQuillan recalls “The Discovery of Surface-Enhanced Raman Scattering;” in No. 2 Elizabeth Andrews presents “Windows on a Lilliputian World: A Personal Perspective on the Development of Electron Microscopy in the Twentieth Century;” while in No. 3 Iwan Rhys Morus brings us “Radicals, Romantics and Electrical Showmen: Placing Galvanism at the End of the English Enlightenment.”

Minerva, Vol. 47, No. 1 presents Sean Johnston’s “Implanting a Discipline: The Academic Trajectory of Nuclear Engineering in the USA and UK;” No. 2 presents Sheila Jasanoff and Sang-Hyun Kim’s “Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea.”

In the **Journal for the History of Astronomy**, Vol. 40, No. 1 Helge Kragh discusses “The Second Moon of the Earth;” Luciano Boschiero writes about “Giovanni Borelli and the Comets of 1664–65;” A. E. L. Davis discusses “Kepler’s ‘Via Ovalis Composita’: Unity from Diversity;” and Robert W. Smith presents “Beyond the Galaxy: The Development of Extragalactic Astronomy 1885–1965, Part 2.” No 2. brings us J. B. Holberg, “The Discovery of the Existence of White Dwarf Stars: 1862–1930;” Andrea Gualandi and Fabrizio Bònoli, “The Search for Stellar Parallaxes and the Discovery of the Aberration of Light: The Observational Proofs of the Earth’s Revolution, Eustachio Manfredi, and the ‘Bologna Case’;” Anastasia Guidi Itokazu, “On the Equivalence of Hypotheses in Part 1 of Johannes Kepler’s *New Astronomy*;” and Ernan McMullin, “The Galileo Affair: Two Decisions”. In No. 3, François Weissemann discusses “Harkins, Perrin and the Alternative Paths to the Solution of the Stellar Energy Problem, 1915–1923;”

and Ileana Chinnici explains “The Relationship between the Ramsden Circles at Palermo and Dunsink.”

The April issue of **Physics Today** was dedicated to the life of John Wheeler, and features Kenneth Ford on “John Wheeler’s Work on Particles, Nuclei, and Weapons;” Charles Misner, Kip Thorne, and Wojciech Zurek on “John Wheeler, Relativity, and Quantum Information;” and Terry Christensen on “John Wheeler’s Mentorship: An Enduring Legacy;” as well as two articles from the archives written by Wheeler. The June issue featured T. N. Narasimhan’s “The dichotomous history of diffusion;” and Joseph Anderson and Orville Butler’s “Industrial R&D in Transition,” which discusses their findings in AIP’s recently-concluded History of Physics in Industry project. The August issue presents Ad Lagendijk, Bart van Tiggelen, and Diederik Wiersma’s “Fifty Years of Anderson Localization.”

The Vol. 49, No. 2 issue of the **CERN Courier** Paola Catapano speaks with George Charpak in “Hardwired for Science”. In No. 3 Keith Potter and other former colleagues remember “Franco Bonaudi: Wise Spirit of the Early CERN.” Issue No. 6 celebrates 50 years of the Courier with “Those Were the Days: Discover-

ing the Gluon” by John Ellis; “Giuseppe Cocconi and His Love of the Cosmos” by Ugo Amaldi, Guido Barbiellini, Maria Fidicaro and Giorgio Matthiae; “1959: The Birth of the CERN Courier” by Roger Anthoine; a selection of highlights from the past fifty years; and a reprint of the entire first issue.

Vol. 77, No. 6 of the **American Journal of Physics** features Wolfgang Rindler, “Gödel, Einstein, Mach, Gamow, and Lanczos: Gödel’s Remarkable Excursion into Cosmology;” while No. 9 presents Eugene Hecht, “Einstein on Mass and Energy.”

In the March 2009 issue of **Physics World**, Maurice Finocchiaro discusses “The Galileo Affair”. In the May issue, Eugenie Samuel Reich recounts the exploits of Jan Hendrik Schön in “The Rise and Fall of a Physics Fraudster,” an abridgement of her new book, *Plastic Fantastic*.

The May 2009 issue of **Sky and Telescope** features L. Robert Morris, “The Day the Moon Stood Still,” on a 1973 airborne solar-eclipse expedition. Albert Van Helden reviews the question of “Who Invented the Telescope?” in the July issue. In the September issue, Marcia Bartusiak looks at the career of Vesto Slipher in “The Cosmologist Left Behind.” ■



L–R: Kathrin Simon (daughter of Francis E. Simon), Walther Nernst, Mrs. Nernst, and Dorothee Simon (Simon’s daughter) outdoors. Credit: AIP Emilio Segrè Visual Archives.



Please help us contact...

...the individuals listed below or their heirs so we can put their oral history interviews online. The Library's project to mount the transcripts of our most valuable oral histories on the web is coming to a successful conclusion. By the end of the year you will be able to read interviews with over 500 physicists and astronomers, including figures like Bohr, Bethe, Chandrasekhar, Gell-Mann, and Rabi, and listen to voice clips of Heisenberg, Gamow, and others, by clicking on the list of names at <http://www.aip.org/history/nbl/oralhistory.html>. For a full description of the project, which is funded by a grant from the National Endowment for the Humanities, see our Fall 2008 newsletter (<http://www.aip.org/history/newsletter/fall2008/oral-history.html>).

Contacting interviewees and heirs for permissions is one of the most important and most time consuming parts of the project, and you and other newsletter readers have been of enormous help in the past. We are counting on you now to help us include these important individuals in our new online archive. If you have contact information or other information, please get in touch with Julie Gass at jgass@aip.org or 301-209-3182.

Atkinson, Robert d'Escourt
Batchelder, Laurence
Bauer, Edmond H.
Blackett, P. M. S.
Broglie, Louis de
Cady, Walter G.
Chadwick, James
Chang, Yü-Che
Delsasso, Leo
Dobrzanski, Leonard
Hartree, Elaine Charlton
Heitler, Walter
Hoyt, Frank
Hubbert, Marion King
Hulst, Hendrik Christoffel van de

Humason, Milton Lisell
Kahan, T.
Jordan, Ernst Pascual
Kelly, Katharine Milsted
Kohn, Hedwig
Kronig, Ralph de Laer
Langevin, Jean
Lau, Ernst Gustav
Lenzen, Victor Fritz
Lucas, René
Masevich, Alla Genrikhova
McVittie, George C.
Meissner, Walther
Meitner, Lise
Peierls, Rudolf

Plaskett, Harry H.
Pohl, Robert Wichard
Perrin, Francis Henri Jean Siegfried
Persico, Enrico
Rasetti, Franco
Schrödinger, Annamarie Bertel
Stern, Otto
Swope, Henrietta
Taylor, Geoffrey Ingram
Thomas, Llewellyn H.
Ullmo, Jean
Vasilevskis, Stanislaus
Von Kármán, Theodore
Wesselink, Adriaan
Yukuwa, Hideki

(Hugh Everett III, continued from page 5)
research; and he did pioneering work in artificial intelligence. As a Cold Warrior specializing in finding "rational" solutions to complex problems, he designed software that modeled human behavior and, yet, he was largely oblivious to the emotional damage he inflicted upon his family as he gradually descended into an abyss of alcoholism and sexual addiction.

The biography relies upon a score of boxes of documents recently discovered in the Los Angeles basement of Everett's rock star son, Mark Everett. The musty contents of the boxes reveal a fascinating record of his tortured life and the various tragedies that afflicted his nuclear family. His correspondence with the leading scientific minds of his era, such as Niels Bohr, Norbert Wiener, and Wheeler, illuminates the bitter, often politicized struggle over how to inter-

pret the mystery of measurement which lies at the heart of quantum mechanics.

As a non-scientist—I am an investigative reporter—I was gratified by the faith that Spencer Weart evinced in me by awarding the AIP grant five years ago, and I hope this investment has been amply repaid by the results. ■

Readers can learn more about Peter Byrne's work at his web site: <http://www.peterbyrne.info/>.

Emilio Segrè Visual Archives

Over 17,000 images are now available online at <http://photos.aip.org>, which is almost two thirds of the collection. We are nearing completion of a project to process and integrate a large group of negatives into the collection. Jenneke and Joan Barton, daughters of AIP's first president, Henry Barton, donated sev-

eral dozen images of their father and others. Beverly Spicer donated over 300 negatives taken of John Wheeler at his office in Austin, TX and at his summer home at High Island, Maine in 1984. David Cassidy donated nearly 50 images relating to the publication of various Projects Physics Courses. Herbert Mataré donated over 100 images taken during the 1950s of his company, the German firm Intermetall. We also thank the following additional donors for contributing images this past year: Sharin Elkholy (University of Houston), Charles J. Peterson, Donald Clayton (Clemson University), Robert Resnick, and Carl Pittman.

At our request, 2008 Nobel Laureates Toshihide Maskawa and Makoto Kobayashi donated photos of themselves. We also received images of the new AIP Member Society Presidents, Whitlow W.L. Au, Thomas M. Baer, Alexander K. Dickison, Mark Hamilton, Cherry A. Murray, and Robert Von Dreele. ■

AIP Launches New Study of Physics Entrepreneurs

The Niels Bohr Library & Archives and the Center for History of Physics have begun field work on a new three-year study of the History of Physics Entrepreneurship (HoPE). In July of this year, project staff conducted interviews with physicists and other staff at nine physics startups in the Boston, Massachusetts area, and we will begin interviews on the West Coast soon.

Over the past two decades physics entrepreneurs have emerged as an important force in advancing innovation and bringing new technologies to the marketplace. One of the entrepreneurs whom we recently interviewed describes start-ups as the “new model” for industrial research, comparing them against the large companies that once dominated industrial R&D. This project, which is funded jointly by a grant from NSF and by AIP, is the first systematic study of physics entrepreneurship.

We believe that the HoPE study will break new ground in analyzing and documenting an important trend in how physicists work in the corporate sector. It follows up on our five-year study of the History of Physicists in

Industry (see a summary of the project at <http://tinyurl.com/l3vtnc>), completed last year. One of the major findings of the earlier study was the extent to which major high-tech firms have come to depend on startups for innovative technology, either acquiring the companies or licensing their intellectual property.

During the study we will interview over 100 physics entrepreneurs and related staff at more than 30 companies in a variety of different fields. We will investigate historical trends as well as current developments by selecting start-ups from several different age cohorts. The companies will include representatives from five still-active enterprises that were founded before 1990 and fifteen companies that have started since 1990.

In addition we will interview physicists from five start-ups that have failed, and five start-ups that have been acquired by other companies. Our definition of physics startups consists of organizations founded or co-founded by a Ph.D. physicist that use knowledge or intellectual property about the physical world and skills in manipulating the

physical world that creates commercial value in the marketplace.

Staff will analyze the interviews and other project data using NVivo, a qualitative software that we first employed in the History of Physicists in Industry study. Products of the study will include a detailed final report that will document and appraise the role of physics-based startups in the evolving economy of the information age and identify areas for further study.

We will create an Entrepreneurial Website containing biographies of the interviewees, their oral history transcripts with audio clips (with the permission of the interviewees), business plans, historical/sociological essays, photos, and the study’s final report. We will assess and document what records are being created that future historians and sociologists can use, as well as create new records (through interviews and other methods).

We are still selecting candidates to participate in the study, and welcome your suggestions and recommendations, along with questions about the study. ■



David Carnahan (L), president and co-founder of NanoLab, and HoPE director Joe Anderson examine nanotube growth plates.

Documentation Preserved

Compiled by Jennifer S. Sullivan

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 online 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

Vega Science Trust, Sussex Innovation Centre, Science Park Square, Brighton BN1 9SB, England.

Video Interviews with Nobel Prize Winners in Physics. Collection Dates: 2004–2006. Size: 12 video oral history interviews.

Brigham Young University, Harold B. Lee Library, Special Collections Division, P.O. Box 26835, Provo, UT 84602–6835, USA.

George Hansen collection. Collection Dates: circa 1900–1981. Size: 7366 items. Restrictions: All of the collection, except the negatives, is open for public use. However, it is kept in cold storage and access requires 24 hours advance notice.

Eugene McPike papers. Collection Dates: 1870–1946. Size: 56 boxes. Restrictions: Access to the papers is restricted, preliminarily processed collection, access is granted through the Supervisor of Reference Services, L. Tom Perry Special Collections.



L–R: Timothy Collins and F.A. White operating a double magnet mass spectrometer used in discovering a new, naturally-occurring, radioactive isotope of tantalum, called Tantalum-180. The discovery of Tantalum-180 provided additional information important to the overall understanding of nuclear structure. The spectrometer, designed by F.A. White, is so sensitive that it achieves complete separation of isotopes even when one type may be more than a million times more plentiful than its neighbor. Credit: National Archives and Records Administration (NARA), courtesy AIP Emilio Segrè Visual Archives.

Carnegie Mellon University, Hunt Library, University Archives, 4909 Frew Street, Pittsburgh, PA 15213, USA.

Carnegie Mellon University Archives, College of Engineering and Science records. Collection Dates: 1901–1987. Size: 15.5 linear feet.

Emerson M. Pugh papers. Collection Dates: 1932–1976. Size: 7 linear feet.

Charles Proteus Steinmetz collection. Collection Dates: 1885–1978, Bulk Dates 1885–1947. Size: 1 linear foot.

Georgia Institute of Technology Library and Information Center, Atlanta, Georgia 30332, USA.

Georgia Institute of Technology Nuclear Engineering and Health Physics program photograph collection. Collection Dates: 1964–1990. Size: 0.25 linear feet, 27 photographs.

Earl McDaniel papers. Collection Dates: circa 1970–1991. Restrictions: This collection is restricted until processed.

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

Alexander Dalgarno papers. Collection Dates: 1974–2002. Size: 100 cubic feet. Restrictions: Restrictions may apply.

National Radio Astronomy Observatory, Archives, 520 Edgemont Road, Charlottesville, VA 22903, USA.

Papers of John Kraus. Collection Dates: 1895–2004. Size: 51 linear feet. Restrictions: Permission of the estate executor is required to quote or reproduce print and non-print materials from the collection. Contact the National Radio Astronomy Observatory Archivist for further information.

Papers of Ronald N. Bracewell. Collection Dates: 1938–2007. Size: 75 linear feet.

Pennsylvania State University. Libraries, Special Collections Division, University Park, PA 16802, USA.

Pennsylvania State University research general vertical file [archival material]. Collection Dates: 1926–[ongoing]. Size: 5 linear feet.

Pennsylvania State University department of physics publications. Collection Dates: 1964–1979. Size: 15 volumes.

Ernest Pollard papers. Collection Dates: 1930–1985. Size: 2 boxes. Restrictions: No restrictions.

Forrest J. Remick papers. Collection Dates: [dates unknown].

Gordon P. Garmire papers. Collection Dates: 1976–1998. Size: 34 cubic feet. Restrictions: Unrestricted access. These materials are stored offsite. Please allow three days for retrieval before use.

Robert L. Weber papers. Collection Dates: [dates unknown].

Frank C. Whitmore papers. Collection Dates: [dates unknown].

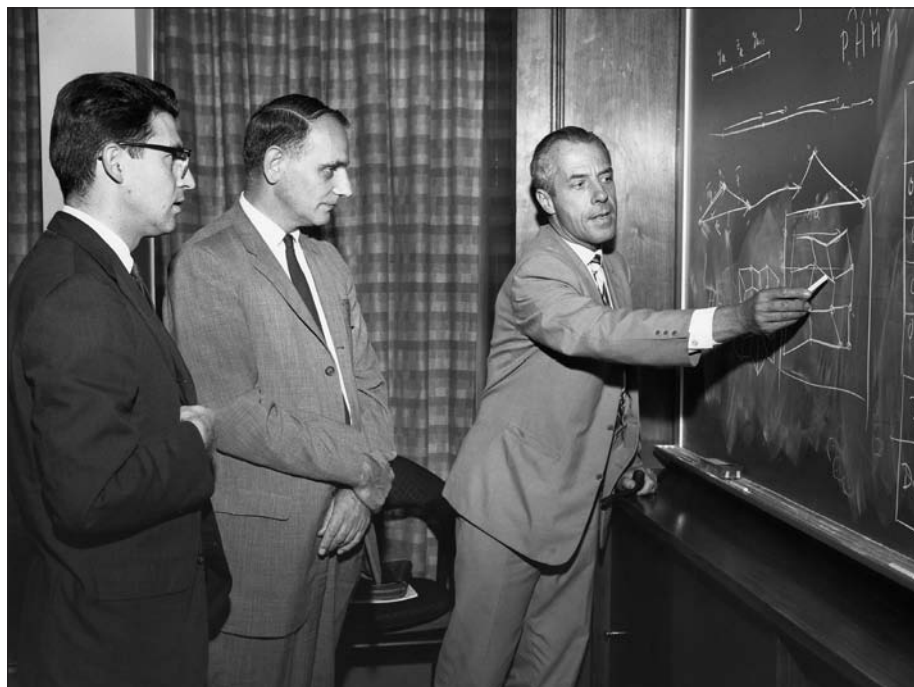
Henry L. Yeagley papers. Collection Dates: 1918–1994. Size: 3.91 cubic feet. Restrictions: Unrestricted access. These materials are stored offsite. Please allow three days for retrieval before use.

Princeton University, Seeley G. Mudd Manuscript Library, 65 Olden Street, Princeton, NJ 08544, USA.

Walter Kauzmann papers. Collection Dates: 1940–1993. Size: 0.6 linear feet (1 archival box, 1 half-size archival box)

University of California, San Diego, Mandeville Special Collections Library, 9500 Gilman Drive, La Jolla, CA 92093 USA.

John Miles papers. Collection Dates: 1943–1998. Size: 4 linear feet (10 archives boxes).



Expanding on a technical point of interest is Professor Rolf Hosemann, of the Fritz Haber Institut of Berlin, at the blackboard, at the informal discussions held on diffraction phenomena at Chemstrand Research Center. Observing at the left are Professor Samuel Krimm, University of Michigan, and Professor Jan Hermans of the State University College of Forestry at Syracuse University, October 11, 1961. Credit: Chemstrand Research Center, courtesy AIP Emilio Segrè Visual Archives.

University of Minnesota Libraries, University Archives, Andersen Library, Minneapolis, MN, USA.

Phyllis St. Cyr Freier papers. Collection Dates: 1948–1990. Size: 2 boxes. Restrictions: Items in this collection do not circulate and may be used in-house only.

University of Southern California, Library, University Archives, University Park, CA 90007, USA.

Claude C. Van Nuys notebooks, correspondence, research reports. Collection Dates: 1906–1952. Size: 3 boxes.

University of TN, Knoxville, Special Collections Library, James D. Hoskins Library, Knoxville, TN 37996, USA.

Ronald L. Kathren collection. Collection Dates: 1973–1992. Size: 4.5 linear feet 3 boxes. Restrictions: Collection is open for research.

Hymer Friedell papers. Collection Dates: 1943–1996. Size: 1.0 linear feet. Restrictions: Collection is open for research.

University of Wisconsin–Madison, University Archives, Steenbock Library, Madison, WI 53706, USA.

Olin J. Eggen papers. Collection Dates: 1943–1998. Size: 6 linear feet (9 boxes).

Hugh T. Richards papers. Size: 14 cubic feet.

Vanderbilt University, Special Collections and University Archives, Jean and Alexander Heard Library, 419 21st Avenue South, Nashville, TN 37203, USA.

Francis G. Slack collection. Collection Dates: 1928–1978. Size: 0.21 linear feet (10 items).

Wesleyan University, Special Collections & Archives, Olin Memorial Library, Middletown CT, 06459, USA.

Rosa Club records. Collection Dates: 1923–1952. Size: 0.75 linear feet (1 box).

(Continued on next page)



L–R: Martin Perl, Richard Lapidus, Stan Shepherd, David Wolfe, attending an American Physical Society (APS) Conference at Pennsylvania State University, Summer, 1974. Credit: AIP Emilio Segrè Visual Archives.

NEW FINDING AIDS

Duke University. Archives. 341 Perkins Library, Duke University, Durham, NC 27706, USA.

Walter Gordy Papers. Collection Dates: 1949–1986. Size: 37.5 linear feet 29,000 Items. Restrictions: Patrons must sign the Acknowledgement of Legal Responsibility and Privacy Rights form before using this collection. Records, such as search committee files or others pertaining to employment where individuals are identified, are closed for 70 years. Unprocessed materials are closed pending processing. In off-site storage; 24 hours advance notice is required for use.

Massachusetts Institute of Technology. Institute Archives and Special Collections. M.I.T. Libraries, Rm. 14N–118, Cambridge, MA 02139, USA.

MIT Office of the President and Chancellor records of the President. Collection Dates: 1960–1984. Size: 84.6 cubic feet Restrictions: In accordance with MIT policy, there are restrictions on access to portions of this collection. Researchers may request permission to use restricted materials. Consult the Institute

Archivist for further information. Retrieval requires advance notice.

Victor Weisskopf papers. Collection Dates: 1922–2002. Size: 60 cubic feet. Restrictions: The collection is open for research. Access to MIT records is governed by Institute record policy. Personnel and student records are restricted for 75 years.

Syracuse University. Archives and Records Management. E. S. Bird Library, Syracuse, NY 13244, USA.

Alfred M. Mayer papers. Collection Dates: 1858–1897. Size: 1.5 linear feet.

University of California, San Diego. Mandeville Special Collections Library. 9500 Gilman Drive, La Jolla, CA 92093 USA.

Gerald Woodrow Johnson papers. Collection Dates: 1938–1995. Size: 17.60 linear feet (45 archives boxes).

Maria Goeppert Mayer papers. Collection Dates: 1925–1973. Size: 4.5 linear feet (12 archives boxes; 1 oversize folder).

University of Tennessee, Knoxville. Special Collections Library. James D. Hoskins Library, Knoxville, TN 37996, USA.

L. H. Gray papers. Collection Dates: 1932–1970 (bulk 1944–1965). Size: 49.5 linear feet (33 boxes).

Antoine Lacassagne collection. Collection Dates: 1900–1994 (bulk 1914–1971). Size: 16 linear feet.

D. E. Lea papers and notebooks. Collection Dates: 1931–1943. Size: 2.0 linear feet. Restrictions: Collection is open for research.

Egon Lorenz reprints. Collection Dates: 1934–1968. Size: 24 linear feet. Restrictions: Collection is open for research.

Oak Ridge National Laboratory Biology Division collection. Collection Dates: 1955–1988. Size: 1.0 feet (1 box). Restrictions: Collection is open for research.

Richard David Present collection. Collection Dates: 1931–1978 (bulk 1946–1978). Size: 13.5 feet (9 boxes). Restrictions: Collection is open for research.

Warren K. Sinclair radiology papers. Collection Dates: 1948–2006. Size: 1.0 linear feet. Restrictions: Collection is open for research.

Lauriston Sale Taylor radiation research papers. Collection Dates: 1908–1989.

“Progress in science depends on new techniques, new discoveries, and new ideas, probably in that order.”

Sydney Brenner

Size: 19.5 feet. Restrictions: Collection is open for research.

Paul Todd collection. Collection Dates: 1959–1987. Size: 13.5 linear feet (9 boxes). Restrictions: Collection is open for research.

Karl G. Zimmer papers. Collection Dates: 1933–1962. Size: 2.0 linear feet. Restrictions: Collection is open for research.

University of Utah. Marriott Library. Special Collections. Salt Lake City, UT 84112, USA.

James John Brophy papers. Collection Dates: 1962–1991. Size: 12.0 linear feet (24 boxes). Restrictions: Twenty-four hours advance notice encouraged. Access to parts of this collection may be restricted under provisions of state or federal law.

Henry Eyring papers. Collection Dates: 1919–1982. Size: 40.25 linear feet. Restrictions: Twenty-four hours advance notice encouraged. Access to parts of this collection may be restricted under provisions of state or federal law.

Steven E. Jones papers. Collection Dates: 1983–1992. Size: 1.5 linear feet. Restrictions: Twenty-four hours advance notice encouraged. Access to parts of this collection may be restricted under provisions of state or federal law.

Don L. Lind papers. Collection Dates: 1963–1994. Size: 6.5 linear ft.

J. Irvin Swigart papers. Collection Dates: 1918–1981. Size: 5 linear feet. Restrictions: Twenty-four hours advance notice encouraged. Access to parts of this collection may be restricted under provisions of state or federal law.

Department of Geology and Geophysics records. Collection Dates: 1968–1983. Size: 4 linear feet. Restrictions: Materials must be used on-site; advance notice suggested. Access to parts of this collection may be restricted under provisions of state or federal law.

Department of Physics records. Collection Dates: 1953–1983. Size: 6.5 linear feet. Restrictions: Materials must be used on-site; advance notice suggested.

Department of Physics records. Collection Dates: 1948–1978 (bulk 1966–1976). Size: 11.25 linear feet. Restrictions: Materials must be used on-site; advance notice suggested. Access to parts of this collection may be restricted under provisions of state or federal law.

University of Virginia. Alderman Library. Special Collections. Charlottesville, VA 22903, USA.

Thomas Fauntleroy Ball papers. Collection Dates: 1825–1961. Size: 265 items. Restrictions: There are no restrictions.

Thomas Fauntleroy Ball papers. Collection Dates: 1902–1960. Size: 3 boxes (200

items). Restrictions: There are no restrictions.

Leander McCormick Observatory records. Collection Dates: 1920–1948. Size: 10 linear feet (101 bundles). Restrictions: There are no restrictions.

Worcester Polytechnic Institute. Archives. George C. Gordon Library. 100 Institute Road, Worcester, MA 01609 USA.

A. Wilmer Duff collection. Collection Dates: 1894–1951. Size: 2 linear feet (2 manuscript boxes). Restrictions: Permission from Archivist required.

Robert H. and Esther Goddard collection. Collection Dates: 1904–1998. Size: 1.7 linear feet (4 document cases). Restrictions: Permission from Archivist required. ■



Alfred Scharff Goldhaber (left) and Gertrude Scharff Goldhaber authored what may have been the first mother-son publications in physics. Credit: AIP Emilio Segrè Visual Archives Physics Today Collection.

2009 Book Donations

The Niels Bohr Library & Archives received a large amount of book donations in 2009. Not only were we able to add new titles to our collection, we were also able to add to existing series. We accessioned over 30 books from a donation by Nancy Eisele from the library of her husband, John A. Eisele. Donald Fitts gave us a generous donation of books in the area of chemical physics. Ruth Freitag donated a number of books on astronomy and astrophysics. We also received books from the library of Thomas C. Hall from his widow Mary Hall. Charles Misner donated books from his library and Alan Chodos of the American Physical Society donated a copy of *Ettore Majorana: Unpublished Research Notes on Theoretical Physics*. Argonne Research Library sent us a very large donation that added volumes to our collection of *Handbuchs der Physik* and Goucher Library also donated a volume of the *Handbuch*. David Cassidy, Samuel Derman, Randolph Reeder, and Gary Boyd all gave generous book donations.

Thomas Lassman and Arjun Saxena both gave us copies of their recently published books.



William C. Kelly's heirs donated nearly fifty books to the library, including publications of *Project Physics* and the 'Encyclopedia and Unified Science' series. The donation also included the books in the photo above. Our thanks to John Layton for facilitating this donation.

Other books donated by their authors this year included:

- Amir D. Aczel, *Entanglement: The Greatest Mystery in Physics* (2002).
- Lawrence Badash, *A Nuclear Winter's Tale: Science and Politics in the 1980s* (2009).
- Klaus Henschel, coeditor with Dan Greenberger & Friedel Weinert, *Compendium of Quantum Physics. Concepts, Experiments, History and Philosophy* (2009).
- John R. Huizenga, *Five Decades of Research in Nuclear Science* (2009).
- Mel Month, *Dreams and Shadows: An Inside Story of Science* (2009).
- Sally Newcomb, *The World in a Crucible: Laboratory Practice and Geological Theory at the Beginning of Geology* (2009).
- Judy A. Rumerman, *NASA Historical Data Book, Volume VII, NASA Launch Systems, Space Transportation, Human Spaceflight, and Space Science, 1989–1998* (2009). ■



Books Wish List

One excellent way to promote the work of the Niels Bohr Library & Archives and the History Center is to designate a donation toward the purchase of a specific book or books. In each newsletter, we will be listing a dozen books of special importance that would add significantly to the value of our collections.

All you need to do is indicate your wish and we will be glad to place a donation name plate at the front of the book thanking you for your support.

1. R. Shankar, *Principles of Quantum Mechanics*, 3rd ed., 2008. Winner of the 2009 Lilienfeld Prize. \$104.
2. Carla Rita Palmerino and J.M.M.H. Thijssen (Eds.), *The Reception of Galilean Science of Motion in Seventeenth Century Europe*, Series: Boston Studies in the Philosophy of Science, Vol. 239, 2004. \$159.
3. E.C. Banks, *Ernst Mach's World Elements: A Study in Natural Philosophy*, Series: The Western Ontario Series in Philosophy of Science, Vol. 68. 2004, X, 227 p., Hardcover. ISBN: 978-1-4020-1662-2. \$127.
4. I.H. Stamhuis, T. Koetsier, C. De Pater, and A. Van Helden (Eds.), *The Changing Image of the Sciences*, 2002. \$104.
5. Xiang Chen, *Instrumental Traditions and Theories of Light: The Uses of Instruments in the Optical Revolution*, 2000, Series: Science and Philosophy, Vol. 9. \$117.
6. Fulvio Melia, *Cracking the Einstein Code: Relativity and the Birth of Black Hole Physics*, With an Afterword by Roy Kerr, 2009, \$25.00
7. John North, *Cosmos: An Illustrated History of Astronomy and Cosmology*, 2008. \$95.00.
8. Richard Staley, *Einstein's Generation: The Origins of the Relativity Revolution*, 2008. \$98.00.
9. Dirk van Delft, *Freezing Physics: Heike Kamerlingh Onnes and the Quest for Cold*, 2008, Series: Edita - History of Science and Scholarship in the Netherlands, \$78.00.
10. Iwan Rhys Morus, *When Physics Became King*, 2005, \$60.
11. Kristian Camilleri, *Heisenberg and the Interpretation of Quantum Mechanics: The Physicist as Philosopher*, 2009. \$81.
12. Kameshwar C. Wali, *Satyendra Nath Bose His Life and Times: Selected Works* (with Commentary), 2009. \$86.25.

The End of "Recent Publications on the History of Physics"

When the American Institute of Physics established its offices in College Park, Maryland, in 1994, a new feature appeared in the History Newsletter: "Recent Publications on the History of Physics." For several years, Stephen G. Brush at the University of Maryland compiled this bibliography and organized it by topic: Philosophy of Science, Science and Society, and so on. In 1998, Per F. Dahl and Eleanor Dahl joined Brush in combining the literature and jointly provided this service. Then the Dahls assembled the bibliography on their own. After fifteen years, however, this column is being discontinued. Per and Eleanor Dahl and Stephen Brush are moving on to other things. Fortunately they continued the bibliography until the function could be provided by new, readily available, internet tools. We at the History Center and Niels Bohr Library & Archives thank them all for their dedication to history of physics. Their service filled a critical niche. ■

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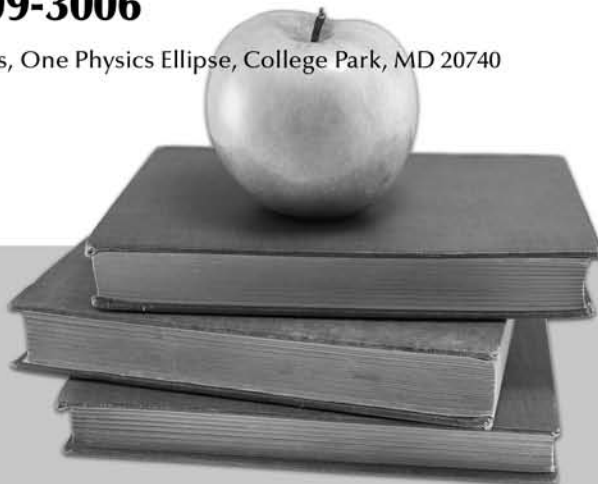
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Any opinions expressed herein do not necessarily represent the views of the American Institute of Physics or its Member Societies. This Newsletter is available on request without charge, but we welcome donations (tax-deductible) to the Friends of the AIP Center for History of Physics (www.aip.org/history/historymatters). The Newsletter is posted on the Web at <http://www.aip.org/history/newsletter>.



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