Albert Einstein

The World Year of Physics 2005

2005 is the 100th anniversary of Albert Einstein's "miraculous year." In 1905 he published three seminal papers describing ideas that have since influenced all of modern physics: the "theories of special relativity," the "photoelectric effect," and the paper on "Brownian motion." In Germany several major scientific outreach events are planned for the "Einstein-Year (http://www.einsteinjahr.de/)", and the United Nations declared 2005 the International Year of Physics.

Celebrate the life and achievements of Albert Einstein (1879-1955) by viewing manuscripts and papers, scientific articles, related news and events, photographs and AV, and even sites for kids.

World Year of Physics 2005

The United Nations has declared 2005 the International Year of Physics - and there's a very good reason why this particular year was chosen to raise worldwide public awareness of physics. It is also the 100th anniversary of physicist Albert Einstein's (http://www.physorg.com/search/Einstein) miraculous year in which he wrote five - or three depending on whom you ask - of his most famous scientific papers.

Also known as the World Year of Physics (WYP) - as declared by the International Union of Pure and Applied Physics - 2005 will feature worldwide events of interest not only to physicists, but also to the general public.

"Science is a powerful instrument. How it is used, whether it is a blessing or a curse to mankind, depends on mankind and not on the instrument. A knife is useful, but it can also kill."

--Albert Einstein

Main Websites (Official sources of materials)

- Scientific Research in the Spirit of Albert Einstein - UNESCO has declared
Albert Einstein. UNESCO has declared 2005, which marks the 100-year anniversary of Albert Einstein’s theory of relativity and the 50-year anniversary of his death, to be World Year of Physics. (Goethe-Institut [http://www.goethe-institut.de/enindex.htm])

- **Albert Einstein Archives** [http://www.albert-einstein.org/]. Everything imaginable on the man and his works. Also has good kid’s pages [http://www.albert-einstein.org/index6.html] and a page of sound files and a video clip. "The Goal of Human Existence" Source: Broadcast on behalf of the United Jewish Appeal, November 4, 1943

**Einstein Archives Online** [http://www.einstein môrno.info/]. Hundreds of pages of manuscripts, papers, and documents are available digitally, along with photographs and other items. See the manuscript describing $E=mc^2$ [images/01-148p01z_high.jpg].

**Einstein Papers Project** [http://www.einstein.caltech.edu/] at the California Institute of Technology


Resources (websites for discussion and Secondary research materials)

- **Einstein Website** (PBS). All kinds of resources and links.


- **Einstein Forum** [http://www.einstein-forum.de/] (Ger.). "If you think something can’t be serious unless it’s boring, you haven’t been to the Einstein Forum."

- **Relativity** Nobel Prize official site.

- **American Museum of Natural History** [http://www.amnh.org/exhibitions/einstein/?src=adwords] exhibit page. Resources, text, ephemera
The Theory of Relativity is One Hundred Years Old (http://www.goethe-institut.de/kug/buw/fut/thm/en163697.htm) On June 30, 1905, Albert Einstein completed his theory of special relativity. This was followed ten years later by the theory of general relativity. These two works revolutionised physics and revised conceptions of time and space. The laws of physics that govern this modern description of nature have formed the basis for the invention of atomic and hydrogen bombs, as well as nuclear power stations. In-car navigation devices, too, only function thanks to the theory of relativity. (Goethe-Institut (http://www.goethe-institut.de/enindex.htm))

- What Did Albert Einstein Invent (http://www.juliantrubin.com/einsteininvent.html)
- "The photoelectric effect" Annalen der Physik, 17, 1905.

"Everything that is really great and inspiring is created by the individual who can labor in freedom."

-- Albert Einstein Out of My Later Years, 1950.

Fun Stuff and Interesting Items

- Einstein Quotes and Humor (http://www.juliantrubin.com/einsteinjokes.html). Page also has commemorative stamps, anecdotes, and relativity humor. Also has many links to Einstein-related topics. (Jokes and Science Home (http://www.juliantrubin.com/sciencejokes.html)).
- More Quotes by Einstein (http://www.quotationspage.com/quotes/Albert_Einstein/) (the Quotations page). Also links to many more quotes (http://www.quotationspage.com/search.php3?Author=Albert+Einstein&file=other).
- Examine Einstein’s Special Theory of Relativity CNN Student News. Interesting tutorial and study program.
- Think Like Einstein (http://www.pbs.org/wgbh/nova/time/think.html) (PBS Einstein
Teacher's Guide (http://www.pbs.org/wgbh/nova/teachers/programs/2311_einstein.html) to the program

Time Traveler game (http://www.pbs.org/wgbh/nova/einstein/hotsciencetwin/index.html). Also from PBS. Learn while trying to work with light-speed activities.

Einstein's Philosophy of Peace (Pledge Peace Union). Albert Einstein was both a scientist and a proponent of peace. His work seems a paradox but he understood well the world in which he lived and how these concepts needed to be in harmony. Young Einstein (http://www.imdb.com/title/tt0096486/). A more humorous view of Albert Einstein, that even he might enjoy. A motion picture satire (1988), in which Albert Einstein is the son of a Tasmanian apple farmer, who discovers the secret of splitting the beer atom to put the bubbles back into beer. When Albert travels to Sydney to patent his invention he meets beautiful French scientist Marie Curie, as well as several unscrupulous types who try to take advantage of the naive genius and his invention.

UB Libraries Resources (Selected list)
Below are a selection of library materials on Einstein and his work. For more books, videos, and other materials, see the UB Libraries Catalog, or search among the databases of journal articles. The following terms are among some of the more relevant:

- Einstein, Albert, 1879-1955
- Space and time
- Quantum theory
- Relativity (Physics)

Books

Biographies and the Personal Side

Discoveries, Theories, Papers, Quotes

  **SEL QC7 .E52 1998.**

  **LOCK and UGL QC71 .E515.**

  **LOCK QC173.52 M54.**

  **SELQC173.6 .B54 2003.**

- *Einstein's Clocks, Poincare's Maps: Empires of Time* / Peter Galison.  
  **LOCK QB209 .G35 2003.**

- *Out of my later years* (Essays by Einstein) (1950).  
  **LOCK & UGL QC16 .E5 A3.**

  **LOCK RB17 .H365 P38 2000.**

  **UGL QC73.8 .C6 B63 2000.**

- *Einstein's revealed.* Boston: WGBH Boston Video; PBS, c1996. VHS (111 min.). "Albert Einstein is known as the sprightly old sage with unruly hair. But now from the pages of his private notebooks and letters, a surprising new picture emerges, a portrait of the physicist as a passionate young man."  
  **UNDERGRADUATE Circulation Desk VHS QC16 .E5 E367 1996.**

- *The Majestic clockwork.* BBC-TV and Time-Life Video, 1974. VHS (52 min.) From Series: The Ascent of man ; no. 7. Focuses on the contributions of Newton and Einstein in the evolution of physics by exploring the revolution that ensued when Einstein's theory of relativity upset Newton 's description
of the universe. **INSTRUCTIONAL TECHNOLOGY SERVICES Videocassette VHS V01104.**


- *Albert Einstein: Light to the Power of 2* Educational dramatization of Einstein and his work.

"My pacifism is an instinctive feeling, a feeling that possesses me because the murder of men is abhorrent. My attitude is not derived from intellectual theory but is based on my deepest antipathy to every kind of cruelty and hatred."

-- Albert Einstein