



2005 Einstein Year in Bern

**Events by Educational
and Scientific Institutions**

Programme

Forum Einstein 2005 Bern
www.einstein2005.ch

Events by Educational and Scientific Institutions

1 April	Inauguration of the Einstein Route Bern
22 April	Reopening of the Einsteinhaus
2 – 3 June	Conference and public panel discussion: «Culture of innovation. From science to product»
24 June	Conference: Einstein's relationship to music
7 – 8 July	Talks and debates by historians of science on Einstein's discoveries
9 July	International Celebration Day: Symposium «Perspectives for physics in Einstein's tradition»
9 July	International Celebration Day: Ceremony
11 – 15 July	EPS13 – «Beyond Einstein – Physics for the 21st Century»
14 – 15 July	Annual congress SCNAT/SPG – «Einstein today» with open house

up-dated calendar of events and links to other organized events for the Einstein Year: www.einstein2005.ch

World Year of Physics 2005

UNESCO and the United Nations have declared 2005 the «World Year of Physics». The purpose of this World Year is to point out the importance of physics for our civilization and culture. Throughout 2005 events will be taking place around the globe on the topic of physics not just for scientists but especially for the general public and young people.

www.wyp2005.org and
www.wyp2005.ch



**UN International Year
of Physics 2005**

One hundred years since Albert Einstein's marvellous year in Bern



In 1905 the then 26-year old Albert Einstein was living and working in Bern. In that year he wrote five papers within a few months, each of which changed the foundations of physics and our understanding of the universe. The year 1905 has thus gone down in history as his marvellous year or *annus mirabilis*. Probably the most famous of his papers of that year is now known as the Special Theory of Relativity. The revolutionary paper on the light quantum later earned him the Nobel prize in physics.

The 100-year jubilee will be celebrated with numerous events throughout the world within the context of the «World Year of Physics 2005». Bern, Einstein's home and workplace during his *annus mirabilis*, is offering a wide selection of scientific and cultural activities, culminating in the festivities on 9 July 2005.

This programme surveys the events organized by the educational and scientific institutions for the Einstein Year 2005 in Bern.

Forum Einstein 2005 Bern

Representatives from a variety of scientific organizations and academic institutes of the University of Bern have combined forces in a *Forum Einstein 2005 Bern* to launch the festivities for the Einstein centenary. *Forum Einstein 2005 Bern* is coordinating the programme of Educational and Scientific Institutions under the auspices of Mr. Samuel Schmid, President of the Swiss Confederation.

International Celebration Day 9 July 2005 – Symposium

Celebration Symposium

Perspectives for physics in Einstein's tradition

This symposium elucidates the three topics that Einstein revolutionized in his marvellous year 1905 and the visionary scientific ideas that emerged from them for our present and future. Leading scientists of our day will introduce these ideas.

Atoms: Prof. Claude Cohen-Tannoudji, Ecole Normale Supérieure, Paris

Relativity: Prof. Alan H. Guth, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA

Photons: Prof. Anton Zeilinger, Institute of Experimental Physics, University of Vienna

The talks will not only address specialists but also interested members of the general public.

Kultur-Casino Bern, Burgerratsaal

9 July 2005, 9:15 – 13:00

**The talks are open to the public
free admission**

**Presentation language:
English**

**Organizer:
Forum Einstein 2005 Bern**

**Main sponsor:
Swiss National Science Foundation**

**Further support:
Bürgergemeinde Bern**

International Celebration Day 9 July 2005 – Ceremony



Ceremony

This function will be the high-point of the jubilee. It is arranged under the auspices of Mr. Samuel Schmid, President of the Confederation. This occasion offers the public and invited guests from science, politics, business and culture a festive programme including:

- Welcoming speech by Mr. Samuel Schmid, President of the Swiss Confederation
- Albert Einstein's Nobel prize. Prof. Anders B ar any, Curator at the Nobel Museum, Stockholm and former Secretary of the Nobel Committee on Physics
- Chances and perspectives for physics today – thoughts by a physicist. Prof. Iris Zschokke-Gr nacher, Basel
- Award of the Einstein Medal and speech by the prizewinner
- Performance of a composition dedicated to Einstein by Bohuslav Martinu and other musical offerings

The ceremony will be transmitted live on the Internet.

Kultur-Casino Bern, large hall

9 July 2005, 16:00–18:00
free admission upon registration

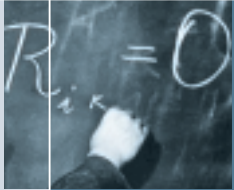
Information: www.einstein2005.ch

Organizer:
Forum Einstein 2005 Bern

Main sponsor:
Max und Elsa Beer-Brawand Fonds

Further support:
Burggemeinde Bern
Swiss Academy of Sciences
Swiss Academy of Humanities
and Social Sciences
Swiss Academy of Medical
Sciences
Swiss Academy of Engineering
Sciences
Science et Cit 

«Discovery, creativity and culture of innovation»/Forum University and So



Conference and public panel discussion: Culture of innovation. From science to product.

The conference will discuss the determinants stimulating or handicapping the innovation process from basic research to the marketable product.

Besides reports from research on innovation, this conference will allow well-known innovators from science and industry to speak. They will be asked how they, from personal experience, evaluate the available support and how they think innovation is best cultivated.

The public panel discussion following the first conference day is devoted to the topic «Einstein as a science organizer and what we can learn from this today».

Talks and debates by historians of science: On Einstein's discoveries and the controversies over their reconstruction

Leading international historians of science will discuss the path that led Einstein to his discoveries during his marvelous year. The scientific issues of the period are introduced, Einstein's working conditions in Bern, his friends and fellow thinkers at the Patent Office and an exact chronology of events in Bern until late summer of 1905.

The debates and talks aim to show which problems, scientific goals and methods Einstein addressed to arrive at his revolutionary results. His exact path to discovery is still contentious today among the experts.

This programme is designed for the general public.



**Culture of innovation.
From science to product.**

Kornhausforum Bern, Stadtsaal

**Conference:
2 and 3 June 2005
registration required**

**Public panel discussion:
2 June 2005, 18:00
free admission**

**Organizer:
Forum University and Society**

**Main sponsors:
Foundation University and
Society Bern
Max und Elsa Beer-Brawand
Fonds Bern**

**Further support:
University of Bern**

**Detailed programmes:
www.einstein2005.ch**

**Talks and debates by
historians of science**

**Kultur-Casino Bern,
Burgerratssaal**

**7 and 8 July 2005
free admission**

**Organizers:
Chair for the history and
philosophy of science at the
University of Bern
Max Planck Institute for the
History of Science, Berlin**

**Main sponsors:
Foundation University and
Society Bern
Max und Elsa Beer-Brawand
Fonds Bern**

**Further support:
Burgergemeinde Bern
History Group of the European
Physical Society
University of Bern**

**Albert Einstein's relationship to
music**

The enthusiastic hobby violinist, Albert Einstein, is the focus of this one-day symposium for scientists and music lovers. His contact with the music scene of his day will be discussed along with the reception of the «Einstein myth» in the history of composition of the 20th century: Arnold Schönberg's furious reckoning with «Einstein's false politics» will be a topic along with the opera «Einstein on the Beach» by Philip Glass.

**Haus der Universität,
Bern**

24 June 2005

**Organizer:
Institute for Musicology
at the University of Bern**

**Detailed programme:
www.einstein2005.ch**

EPS13 – «Beyond Einstein – Physics for the 21st Century»

13th general conference of the European Physical Society (EPS).

The topic of this congress is current research in the areas of science that Albert Einstein unlocked with the famous publications of his marvellous year 1905. All the scientific Divisions of EPS as well as the European Inter-governmental Research Organizations ESA, ESO and CERN are contributing to the conference's programme.

EPS13 is composed of three parallel conferences:

1. Photons, Lasers and Quantum Statistics
2. Relativity, Matter and Cosmology
3. Brownian Motion, Complex Systems and Physics in Biology

Reports on new research results, preferentially by young scientists, will be given particular attention.



University of Bern, main building
and Building of the Exact Sciences

11 to 15 July 2005

Conference language:
English

Detailed programme:
www.eps13.org

Organizers:
European Physical Society (EPS)

in collaboration with:
European Space Agency (ESA)
European Southern Observatory
(ESO)
European Organization for Nuclear
Research (CERN)

Annual Congress SCNAT/SPG – «Einstein today»

Annual congress of the Swiss Academy of Sciences (SCNAT) and the Swiss Physical Society (SPG)

The two-day congress on the topic «Einstein today» begins on Thursday with a professional conference on current issues in physics and a ceremonial meeting of the Academy on life and the cosmos. On Friday the congress continues with an open house also for pupils, teachers and the wide public.

Open house

Discover physics, its successes, its dreams and its ambitions: the giant telescopes, the exploration of the planet Mercury, physical visions of life. Find out about how strongly Einstein's revolutionary ideas are still influencing our daily lives.

Spectacular experiments, a video conference and talks and exhibitions will be open to the wide public.

University of Bern, main building,
Building of the Exact Sciences,
and Uni Töbli

Annual conference SPG:
14 July 2005
registration required

Public annual congress SCNAT:
14 and 15 July 2005
free admission

Open house:
15 July 2005

Detailed programme:
www.einsteinheute.ch



Following Einstein's traces through Bern



Inauguration on
1 April 2005 with
book vernissage and
première of the guided
tour by StattLand
«Bern relative»

Realization:
Chair for the history and
philosophy of science at
the University of Bern

Signposting with the
support of the Tiefbau-
amt der Stadt Bern

Guided tour by
StattLand:
www.stattland.ch

Einstein Route Bern

For this jubilee the University of Bern has laid out a route past roughly 90 sites that give an insight into Einstein's life and work during his Bernese period. A richly illustrated book describes the essential events and scientific accomplishments of the young physicist and patent official. A separate map containing the routes and brief descriptions of the sites is an ideal companion for along the way. The Verein StattLand offers guided tours through the old city.

Book and map:

Ann M. Hentschel / Gerd Graßhoff.
Albert Einstein: «Those Happy Bernese
Years». With a contribution on the Swiss
Patent Office by Karl Wolfgang Graff.
Stämpfli, Bern 2005.

(180 pages, paperback, CHF 28.00 /
EUR 18.50, also available in German)

Book and map available in bookstores.
Released in April 2005.



Einsteinhaus and
museum:
Kramgasse 49, Bern

Opening hours and
other information:
www.einstein-bern.ch

Reopening:
22 April 2005

Main sponsors:
AAM ATAG ASSET
MANAGEMENT
Federal Office of
Cultural Affairs
Kultur Stadt Bern
Lotteriefonds Kanton
Bern
State Secretariat for
Education and Research
Third Millenium
foundation

Einsteinhaus: Where the theory of relativity and the hypothesis of the light quantum were conceived

Albert Einstein lived with his family
at Kramgasse 49 in Bern from 1903
to 1905. The Einsteinhaus, which
is open to the public, has been
managed as a museum by the Albert
Einstein Society since 1979.

The first fundamental paper on re-
lativity theory was written in this
apartment in 1905 as well as the
pioneering article on light quanta,
for which he was awarded the Nobel
prize for 1921.

The remodeled exhibits in the
Einsteinhaus provide a glimpse into
Einstein's living quarters around
1905 and information about his
Bernese years and scientific work.

Programme coordination of Educational and Scientific Institutions

Forum Einstein 2005 Bern

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March 2005

The image is a grid of astronomical observations. The background is a dark field filled with numerous stars of varying brightness and colors, ranging from yellow to white. A prominent feature is a bright, dense cluster of stars in the lower-left quadrant, which appears to be the core of a star cluster or galaxy. The grid is composed of several rectangular panels, with a central panel containing a text overlay.

www.einstein2005.ch