

World Year of Physics 2005: a retrospective view



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www.eps.org www.wyp2005.org





HISTORICS

Initiative launched by EPS in 2000:

Occasion: 2005 is the 100th anniversary of the "Annus Mirabilis" of Albert Einstein: Theory of relativity, quantum theory, theory of Brownian motion

Endorsed by:

- ₱ World Congress of Physical Societies, Berlin, Dec. 2000
- f EPS Council, Mulhouse, March 2001
- f General Assembly of IUPAP, Berlin, Oct. 2002
- f General Conference of UNESCO, Paris, Oct. 2003
- f 58th General Assembly of United Nations, New York, 10 June 2004 Thus officially the "International Year of Physics"
- Creation of an International Steering Committee (2002)
- "Supported" by EU Commission (Brussels, 2004)



General Assembly

Distr.: Limited 1 June 2004 English

Original: French

Fifty-eighth session Agenda item 169 International Year of Physics, 2005

> Brazil, France, Lesotho, Monaco, Portugal, Singapore and United Kingdom of Great Britain and Northern Ireland: draft resolution

International Year of Physics, 2005

The General Assembly,

Recognizing that physics provides a significant basis for the development of the understanding of nature,

Noting that physics and its applications are the basis of many of today's technological advances,

Convinced that education in physics provides men and women with the tools to build the scientific infrastructure essential for development,

Being aware that the year 2005 is the centenary of seminal scientific discoveries by Albert Einstein which are the basis of modern physics,

- 1. *Welcomes* the proclamation of 2005 as the International Year of Physics by the United Nations Educational, Scientific and Cultural Organization;
- 2. *Invites* the United Nations Educational, Scientific and Cultural Organization to organize activities celebrating 2005 as the International Year of Physics, collaborating with physics societies and groups throughout the world, including in the developing countries;
 - 3. Declares the year 2005 the International Year of Physics.



Mulhouse, 29 Juin 2002





The objectives of a "World Year of Physics"

- Decrease the gap between Physics and Society
- Increase the interest of the General Public in Physics
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Improve the communication between Science and Society



INTERNATIONAL "PHYSICS" EVENTS



- * Kick-off meeting at UNESCO (Paris): "Physics for Tomorrow", 13-15 January 2005 www.wyp2005.org/unesco/
- * 2d IUPAP Conference on "Women in Physics", Rio, Brasil, May 2005
- * International Physics Olympiads, July 2005, Salamanca, Spain
- * 13th General Conference of the European Physical Society, EPS13
- "Beyond Einstein Physics for the 21st Century" 11–14 July 2005, Bern, Switzerland (www.eps13.org/)
- * International Conference of Physics Students (ICPS), Coimbra (Portugal), August 2005
- * IUPAP World Conference on "Physics and Sustainable Development" 31 October - 2 November 2005, Durban, South Africa
- * Closing Symposium of WYP Recife, Brasil, 19-21 December 2005

WYP2005 International Events



Launch Conference of the

WYP2005: « Physics for Tomorrow », 13-15 January 2005, at UNESCO headquarters, Paris, France. The total attendance was 1200, with 50% comprised of students (1/4 female) between the ages of 17 and 21 from \sim **70 countries**. The students were selected in each country based on their excellence in science, notably through their participation in the Physics Olympiads. The programme included 11 plenary talks, 2 round table discussions, with the participation of 8 **Nobel laureates**

• Organisers: EPS, SFP, IUPAP, UNESCO









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INTERNATIONAL "GP" EVENTS



- * « Physics enlightens the world », 18 April 2005 coordinated by Max Lippitsch (Austria) www.wyp2005.at
- * **« Physics talent search »,** Beverley Hartline (APS) (international contest, Taiwan, 31 December 05 4 January 06)
- * « International Poster Contest », Caitlin Watson (IOP)
 - (final rating at EPS13 13 July 05)
- * **«WORLD WIDE WEBCAST »,** 1 December 2005 Paola Catapano, CERN
- * Etc.



Impact of WYP

- The impact needs some time to be analysed
 - Feedback seems positive
- Response of politicians: slow, but finally OK
 - funding has often followed
- Media coverage coming first from radio and press not much TV -
 - articles mostly on science pages of newspapers
 - mainly on Einstein, not much on physics
- What is the origin of the "momentum"?
 - Is the *international* character determinant (preparatory meetings, exchange of information, etc.)?
 - Influence of the UN resolution declaring 2005 as IYP
 - 86 countries (Europe 37, America 18, Africa 10, Asia-Middle East-Oceania 21) are present on the international web site (www.wyp2005.org), with a given WYP coordinator and dedicated web page
- One year doesn't mean too much
 - what we can do beyond 2005?
 - how to keep the momentum after 2005?
 - how can we best utilise what we have learned this year?



Beyond 2005?

- An international year every year?
 - 2009, World Year of Astronomy
- Keep the successful outreach activities going on
 - competitions at school, exhibits, conferences, science cafés...
- Physics teaching at school
 - continue the reflexion on science teaching
 - maintain links between researchers and teachers
- The scientists must continue their involvement in physics outreach
 - this type of activity should be recognized in career promotion
- Internationally-linked activities appear to be essential
 - future of the WYP Steering Committee?
 - a "physics and society" Action Committee at IUPAP?
- Dialogue between physicists and decision-makers to be continued Forum "Physics and Society" Graz, Austria, 20-22 April 2006





- •Which structure (national committee, etc.) has been implemented for WYP?
- •Which funding did you get (amount, origin: government, industry...), and the various types of sponsoring
- •The activities: exhibits, actions in schools, physics outreach, open doors in labs and universities, interactive experiments, street events, etc. Which were **the most successful**?
- •did you make videos, cinematographic material...?
- •Involvement of press, media, TV, radio...
- •Advertising material, stamps, coins...
- Contact with policy-makers
- •Statistics any information on the influence of WYP on student enrolling?

