

WYP 2005

ITALIAN EVENTS (by R.A. Ricci)

NCC:	NATIONAL COORDINATION COMMITTEE
SIF:	ITALIAN PHYSICAL SOCIETY
AIF:	ITALIAN ASSOCIATION FOR PHYSICS TEACHING
SAIt:	ITALIAN ASTRONOMICAL SOCIETY
INFN:	NATIONAL INSTITUTE OF NUCLEAR PHYSICS
CNR:	NATIONAL RESEARCH COUNCIL
*MIUR:	MINISTRY OF UNIVERSITY AND RESEARCH
*MIAMB:	MINISTRY OF ENVIRONMENT

FUNDINGS(*):	MIUR:	200.000 euros
	MIAMB:	20.000 euros
	EPS-U.E.	200.000 euros

1) ACTIVITIES (SIF-NCC-INFN)

Environmental radioactive project (see Report)

50 kits composed of Apple iBook 12', Geiger Müller GM-ID counters + GPS distributed to 50 Schools in Italy (beginning of school year 2005-2006)

50% of participants have produced a large amount of data covering many sites in their region completed with the satellite map of the sites.

Virtual classroom project (see Report)

A set of DVD records of experiments (Galilei, Photoelectric effect, speed of light, energy conservation, films on the life of prominent Italian physicists i.e. Fermi, Pontecorvo, Pacinotti, ...) has been distributed to Secondary Schools and Educational Departments Access.

At the moment only “non-public lessons” have been made to verify the behaviour of the apparatuses and the reliability of the system with good results.

Exhibitions

“Beyond the Pillars of Hercules” (Catania, SIF Annual Congress, September 2005)

“Learning by Playing” (Pavia, October 2005)

“The Square Wheels ” (Palermo, October 2005)

International Workshop “Physics, From School to the Job Market”

(Varenna, June 2005) in collaboration with the Italian Association of Science Faculties Deans (opening welcome event)

Celebration Day

(Villa Mondragone, Monteporzio Catone, Rome, December 14, 2005) on Future Perspectives of Physics

Editorial Initiatives

Proceedings of the Varenna International Workshop and of the Celebration Day

**Collection of “Oldies and Goldies” of Il Nuovo Cimento (150 anniversary):
Selection of papers 1855-1935**

2) ACTIVITIES PERFORMED BY OTHER NATIONAL INSTITUTIONS AND ASSOCIATIONS

a) AIF (Italian Association for Physics Teaching)

Large participation of young students.

Diversification of events: Experiments made by students; physics weekend; Open Laboratories (Padova), Physics in the Street (Sassari, Ivrea); Science of Kids (Trieste); Excursus on History of Scientific Ideas (CD Rom); Cinematographic reviews (Celluloid physics); Collection of simple toys (The Einstein box) (Ticino); History and collection of physics instruments; DVD on “Where is Light?”; Scientific Theatre.

b) SAIt (Italian Astronomical Society)

Events dedicated to the centenary of the death of Pietro Tacchini, the founder of the Italian Spectroscopy Society, with a prize awarded at the National Congress in Catania (May 2005).

Didactic activities offered to students, teachers, and to the main public (Florence); “science and Magic”; “History of Science”; “Hundred Years of Solar Physics in Italy”; Conferences on “The Evolution of the Universe”.

Topical seminars and astronomical observation at the Osservatorio Astronomico in Palermo; National week of Astronomy (May 2005) at the Reggio Calabria Planetarium.

c) ICTP (International Center of Theoretical Physics, Trieste)

The main activities held by the Center have been considered as part of the WYP 2005 (National and International meetings and courses on fundamental and applied physics, Conferences and Workshops on Seismic Dynamical Models, Ecosystems, weather and climate; quantitative ecology, interactive systems at nanoscale, soil physics, accelerator-driven systems, renewable energies, ...)

2) LOCAL AND SPECIFIC ACTIVITIES

Map of the Cities

a) Lombardia:

Activities publicized using press, radio, TV, Internet, followed by thousands of people

Events Milano: Conferences: “Dear Professor Einstein” (Brera Astronomo Museum); “Seeing Science”; Stages of Physics laboratories for young students; performance on physics (for children of Primary Schools).

Travelling exhibitions: “At the Pillars of Ercoles”; “From Democritos to Quarks”

The XXI Congress of History of Physics and Astronomy (Milan, November 2005) and the III Milano Workshop on the Physical Science in the Third World (Bogotá, June 2005) so as the “Highlights in Physics 2005” of the Department of Physics were dedicated to WYP2005.

Events Como: Exhibition on “Physics around us. 100 years of discoveries changed our everyday life” (thousand of people visiting, poster competition among students of Secondary School). A series of Conferences on Cosmology, Nuclear Physics, Neutrinos and application of Physics to Medicine.

b) Piemonte:

Coordination by a Promoting Committee of the region (Torino University, Torino Politecnico, INFN, AIF, MIUR, FIAT, UNESCO Center, Science Academy).

Important events: Competitions (among students of Secondary School): “Einstein and the under-14”; “Women and Physics”; “Louis Lagrange for Physics”.

Seminars and Conferences on didactics and history of physics (Department of Physics and AIF, Torino): “Relativity”; “Brownian Motion”; “Physics in 1905”; “Physics and the Automobile”

Open and movable Laboratories; Physics in the streets (Ivrea); “Nuke is not Devil”; “Physics and Wireless Sensors in the Sport Ground”.

Exhibitions on “Microscopes in Physics”; “Physics on the Wheels”; “Superconductors and Semiconductors”; “Relativity in the Everyday Life”; “Time and Clocks”; “Einstein: A Genius at Work”; “Fermi. The Scientist and the Man”.

Shows and Performances on Marie Curie, Galilei, Relativity, CD and DVD on Modern Physics: A WYP2005 bus.

c) Veneto (Padova)

Open laboratory at the Laboratori nazionali di legnaro. Participation to the “National Radioactive Project”.

Exhibition: “Sperimentando 2005”. Observation of venus and Sun Spots with the telescope of the Astrophile Association. Launch of water rockets, ascension with the mongolfier.

d) Emilia (Bologna)

Exhibition: “The Mystery of Gravity” hands-on experiments for young people.

e) Campania (Napoli)

**“The City of Science”: 40 Conferences:
Exhibitions “Physics Microscopes of INFN”; “The Spring of Science”: “The Beautiful Mind”. 10000 studentsa visiting.**

Competition on “Scientific Theater”; The UNIDANSA 2005 performed in Barcelona with “Physics of Dancing”

f) Sicily (Palermo, Messina)

Conferences on “Einstein Philosopher and Epistemologist”; “Einstein the Man and the Scientist”; “Astrophysics and Relativity”; “Relativity and Cosmology”; “Physics of Nanosystems and Technological Application” (Palermo). The exhibitions “The Square Wheels” in the frame of SIF national programme had a very large audience.

The national radioactive Project is very successful in Messina. A celebration of the “Scientific and Human Figure of Ettore Majorana” was held in Messina.

The students of Secondary Schools were involved in the design and realizations of sundials solar clocks and of CDs of different subjects (Aristoteles, Archimedes, Leonardo, Galilei, Marie Curie, Einstein).

