



Festival della Scienza

Genoa Science Festival

25th October – 6th November 2007

Fifth edition

Rewarded by an exponential success which, through the years, has brought it to affirm itself as the most highly awaited Italian appointment for scientific dissemination (in 2006 it touched the record amount of 250 thousand visits) and the award of being one of the 10 *best practices* chosen by the European Commission, from **the 25th October to the 6th November 2007 the Science Festival returns to Genoa**; and this year's theme will be ***Curiosity***.

Thirteen days to find out about the latest frontiers and the most original discoveries of the contemporary scientific panorama, while giving added value to and involving a whole territory, Liguria, in a party that unwinds itself down the port, the roads, the historic buildings and the museums of one of the most inspiring Italian seaside cities, with incursions into other places in the province and the region. A moment for the **scientific community** to confront itself, an occasion for a mutual exchange between the exponents of different disciplines, but also a chance for ennoblement and, still more, a **meeting between the most cutting edge forms of knowledge and the thirst for knowledge belonging to every common citizen**.

This edition, in the mould of the others, is rich with contents and news and confirms its traditional interdisciplinary approach of mixing scientific culture with Humanist culture, declined into hundreds of events (this year they will be **more than 400**) taking the forms of **exhibitions, workshops and interactive didactic courses**, photographic and artistic **exhibits, conferences, round tables and workshops, theatre shows and musical performances**. From the suggestive ***Antarctica. Earth's white heart***, a photographic voyage, taking place during the **International Polar Year**, to the virgin frontiers of the Earth which are essential to the climatic, naturalistic and social equilibrium of the planet, and which also have the interactive exhibits of the expositive course ***Pole Position. Adventure between the ices at Earth's edges*** dedicated to them, to ***Volcanoes: explosions and effusions***, a multimedia dive, with models, simulations and films, into the bowels of the earth and into the mysterious mechanisms at the origin of eruptions; to going behind the sets of cinema special effects (protagonists of the **Spazio Telecom**), where computer simulations and interactive solutions allow the public to **experience some of the greatest successes of all time from within**.



From ***Tomorrow. The sensitive future***, an exhibition on global warming which lies somewhere between contemporary art and science that aims to investigate the problems tied to safeguarding the environment and biodiversity, to the mysteries of the origin of life and of evolution which are explored in ***Life. A journey through time***, a gallery of shots, never before seen in Italy, taken by the globetrotting photographer **Frans Lanting**, who is accompanied by the European première of a multimedia symphonic concert composed expressedly by **Philip Glass** to provide a commentary to Lanting's images. Passing by the direct experimentation of the most unusual and innovative properties of materials, offered by the traditional appointment with the exhibits of ***The wonders of science***.

Among the shows there is ***Faust in Hiroshima***, a musical reading of the controversial relationship between science and ethics which begins with the invention of the Atom bomb, and **Corrado Augias'** return to theatre with ***Reason's flame***, the lesson-show on **Giordano Bruno's** première.

The **conference** programme this year once again sees some of the most important personalities of the Italian and international cultural and scientific panorama as protagonists. To name but a few: **Marc Abrahams, Salvatore Maria Aglioti, Guido Barbujani, Enrico Bellone, Luigi Berlinguer, Carlo Bernardini, Giovanni Bignami, Michel Bitbol, Edoardo Boncinelli, Luigino Bruni, Eva Cantarella, Luigi Luca Cavalli Sforza, Vittorio Colizzi, Rodolfo Costa, Cristiano Dal Sasso, Francesco De Martini, Mario De Caro, Tullio De Mauro, Mauro Dorato, Giovanni Dosi, John Dupré, Freeman Dyson, Michele Emmer, Luciano Fadiga, Doyne Farmer, Marco Ferraguti, Russell Foster, Gabriele Gentile, Henri Giordan, Giulio Giorello, Louis Godart, Jane Goodall, Umberto Guidoni, Margherita Hack, Marc Hauser, Furio Honsell, Julian Paul Keenan, Almamy Konté, Sylvie Joussaume, Lawrence Krauss, Jean-Marc Lévy-Leblond, Roberto Lucchetti, Luigi Lugiato, Pier Luigi Luisi, David MacArthur, Luisa Maffi, Ignazio Marino, Alberto Marmont, David Mborá, Luca Mercalli, Reinhold Messner, Federica Migliardo, Alessandro Minelli, Luc Montagnier, Cesare Montecucco, Michel Morange, Aldo Naouri, Luigi Nicolais, Xavier North, Franco Pacini, Maurizio Pallante, Domenico Parisi, Massimo Piattelli Palmarini, Michelangelo Pistoletto, Lucia Poli, Hilary Putnam, David J. Rapport, Franco Rebuffo, Matthieu Ricard, Carlo Alberto Ricci, Richard Roberts, Patrizio Roversi, Gian Enrico Rusconi, Sandra Savaglio, Gianna Schelotto, Aldo Schiavone, Zheng Shi Ling, Salvatore Settis, Roberto Speciale Bagliacca, Jack Steinberger, Carlo Sini, Sandro Stringari, Ian Tattersall, Chiara Tonelli, Giorgio Vallortigara, Achille Varzi, Alex Vilenkin, Elisabetta Visalberghi, Stefano Zamagni.**

The Science Festival is organised by the **Science Festival Association** in partnership with **Telecom Progetto Italia, Compagnia di San Paolo** and the **City of Genoa**.



EXHIBITIONS, WORKSHOPS, EXHIBITS

Climate change and **global warming**, safeguarding of **ecosystems** and defence of **biodiversity**, evolution and **sustainable development**: the exhibitions in the 2007 Science Festival's programme are a chance to reflect on the great problems of the age, "curiosing" through the mysteries and questions posed by scientific research, unravelling their multiple facets with the help of transversal languages, interactive approaches and multidisciplinary exhibits.

It is precisely to investigate the evermore pressing challenges posed by the environment, during the **International Polar Year** which will be held from 2007 to 2009, that the Festival proposes **Antarctica. Earth's white heart**, a voyage to discover the Poles, Earth's last virgin frontiers, essential for the climatic, naturalistic, historic and social equilibrium of the planet, a paradigm of the logic of international cooperation, through world-renowned photographers' images. The exhibition, curated by Genoa's National Antarctic Museum, is a fascinating gallery of everyday images from the scientists who have their base in the South Pole's lives, with the white continent's breathtaking landscapes as a backdrop.

The expositive course **Pole Position. Adventure between the ices at Earth's edges** is also dedicated to the ice-lands' mysteries. It is curated by the Tridentino Natural Science Museum and by using interactive and immersive exhibits shows visitors the important geographic, geologic and biologic traits that mark out the Poles of the planet: from the secrets of the icebergs to the carrots of ice which hold in them the history of the climate, from the albedo phenomena to the seasons' continuous cycle, from Earth's magnetism, running through the Greenhouse effect's principal indicators, from the progressive fusion of the ice to the variations in the sea level.

From the secrets of the polar regions to those of the origin of life and to Earth's aspect millions of years ago with **Life. A journey through time**: a voyage retracing evolution's steps with images, on exposition for the first time in Italy, of the most fascinating place on the planet photographed by **Frans Lanting**, who is also the protagonist of a **performance-conference** at the Festival. A European première of a multimedia symphonic concert with music by **Philip Glass** is connected to the exhibition, made possible by ERG.

The installations on display in the **Spazio Telecom**, the most visited area in the last editions, aim to bring about the interaction between the public and some of the most loved cinema characters. Telecom Progetto Italia has chosen a selection of greats from the history of cinema and, thanks to an interactive course, will let the public understand and



directly experiment the technological secrets which determine their spectacular nature, creating a sort of ideal course through the history and the future of the seventh art.

The theme of sustainable development is also at the heart of the ***Tomorrow. The sensitive future*** project. The exhibition and the conferences tied to it, made possible by the contribution of Enel and National Geographic Channel, intend to make people reflect on the principal challenge that our planet will have to face in the next, few years: global warming. Where does the grave environmental crisis the Earth is undergoing come from? Are there any possible solutions and, if so, what are they? Certain in the knowledge of an urgency for an adequate strategy of safeguarding of the ecosystem, which promotes new energetic policies together with new models of behaviour and new lifestyles, ***Tomorrow. The sensitive future*** proposes itself as a symbolic space for common discussion, and faces the theme of our tomorrow, by using the exposition of works and installations by international contemporary artists, such as **Michelangelo Pistoletto, Armin Linke, Yi Zhou, Edoardo Malagigi**, to investigate the ways, the forms and the images with which art can represent the immediate future. In the areas adjoining the exhibition there will also be interactive posts present, to experiment with sophisticated measuring systems of atmospheric currents, ecological materials which can be used in each of our own houses and to calculate your own “ecological footprint”.

Mini Darwin in the Galápagos Islands. Evolution explained to children is also dedicated to the theme of environmental safeguard and the defence of biodiversity. The fascinating reconstruction of the Galapagos Islands, curated by SISSA Medialab, traces the steps which brought Charles Darwin to fixing the laws of evolution. The exhibition takes its cue from the steps of the expedition with the same name charting the course of the famous naturalist taken by seven children, a biologist and an oceanographer between December 2006 and January 2007. There will be illustrations and reproduction of the animals which populate the distant Pacific archipelago, as well as photographs and video-projections of the original expedition from the beginning of the Nineteenth Century and hypertexts useful for learning the secrets of camouflage and evolution.

Among the consolidated proposals which return to enrich the Genoese calendar is the ***Wonders of Science. Curiosing among materials***, with the contribution of Telecom Progetto Italia, a chance to reflect on the infinite structures and properties of matter and materials and to discover their interesting and original applications. As well as the most successful exhibits of the 2006 edition, new experiments on the behaviour of photoelastic materials are proposed, on the phenomena which occur inside fibre optics, in the surprising properties of viscoelastic fluids and the interactions between light and matter.

A course which takes its cue from research projects which are taking place at the moment which aims to show the wonderful characteristics of the materials of the future.



The National Geophysics and Volcanology Institute (INGV) this year participates in the Festival with ***Volcanoes: explosions and effusions***, an interactive exhibition in which spectacular exhibits, plastic reconstruction, multiprojections and 3D films gift the public with a pleasant incursion into the bowels of the Earth to investigate its secrets. The model of a volcano welcomes the visitors, with the possibility of assisting to a simulated eruption, to understand pressure's role, the mouth and tube's condition and the difficulties tied to making long term predictions.

From the bowels of the planet to the curves of the cosmos with ***The road to space runs through our country***, curated by the Italian Space Agency (ASI) and the contribution of Finmeccanica: lights, images, sounds and environments from the Earth to the Moon, passing by Mars, floating on a comet and carrying on the adventure onto Deep Space. A tale told through images, using the data collected by satellites in orbit around the Earth to read some of the phenomena crucial to the future of our planet through the prism of interplanetary space: desertification, pollution, climate change.

The sky explored not only as an object for study by aero-spatial physics, but also as a source of suggestions and magic is at the heart of ***The skies of the world***, an interactive didactic course dedicated to the smallest among us, to discover the myths and legends about the sky in the imagination of different peoples, in particular those from China and Africa. The initiative, curated by the Arcetri Astronomic Observatory in collaboration with the international project Universe Awareness foresees, alongside a show inside the planetary Starlab which places projections and Chinese shadows side by side and uses interactive activities which guide children to represent their own vision of the world by using different expressive and manipulative techniques as well as a conference-show by South African astronomers.

The colours, the fascination, the mystery, the energy of African nature, together with the dignity and beauty of the people from the Black Continent, are the soul of ***In Africa: forms, colours, emotions***, an open-air show set up with the collaboration of the Jane Goodall Institute Italia in the heart of Genoa with a written introduction by the primatologist Jane Goodall, the UN Peace ambassador: more than 40 images with great visual impact, the result of years of photographic reportage with the natural photographer **Alessandro Bee**, from the deserts of Namibia to Rwanda's forests, from the Sahara desert to Rift Valley's lakes: all give the public a chance to reflect on the harmony and fragility of our planet and on the importance of safeguarding its delicate equilibriums for the good of future generations.



Following their success in the 2006 edition, the creations and interactive installations of ***The metamorphosis of sense*** of Casa Paganini return, working on different levels to investigate the complex relationship between the senses, movement and emotion, and involving the public in the experimentation of the fascination aesthetic dimension which is common to both scientific and artistic research. The course, which is joined by a series of meetings-concerts on this theme, is the result of the decade-long activity of **InfoMus Lab**, who, for the Genoese set-up, have used virtual orchestras which the visitor can awaken by walking onto an empty stage, made up of rooms, stairs and spaces which become musical instruments sensitive to the gestures and perceptions of those that walk across them.

In respect of the interactive approach which has always been one of the Festival's characteristic traits, capable of stimulating in children the natural *curiosity* for knowledge using a hands-on method made up of exhibits which let you learn by having fun, this year once again the Genoese programme proposes dozens of **workshops** with themes that range from **nutrition to sustainable agriculture and robotics**, from **physics to mathematics**, from **Energy to domestic safety**.

An immersion into the rainforest with striking images, accompanied by the typical sounds of the tropical environment and films that run through the productive cycles of bananas and life in the plantations, is represented by the exhibition ***An A+ habitat. 15 years of collaboration between Chiquita and Rainforest Alliance***. The course, realized with the contribution of Chiquita, is the chance to discover, in a nine-tier interactive course, the requisites necessary to obtain certification from the Rainforest Alliance, the American non-profit organisation active in the definition of the reference standards for eco-sustainable agriculture in tropical countries. In particular, the Chiquita Nature & Community Project is presented, from which the institution of the Nogal reserve is derived, a concrete example of ecosustainable agriculture, where man's reasons and the natural habitat co-exist in harmony with productivity.

Another much anticipated appointment by the Festival's public is ***Matefitness***, which doubles in the 2007 edition, proposing, along with the 300 gym and mathematics activities, an original interactive workshop dedicated to the inviting themes of **ethnomathematics**, with games and experiments which will allow you to try different mathematic practices in the way in which they were developed around the world: from improvised percussion concerts, to African geometry rebuses, from Inca accountancy to Chinese shadows and Egyptian mathematic papyruses.

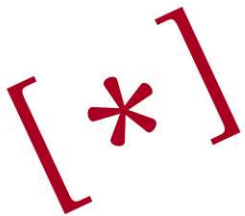


Aiming to marry game and experimentation we present **Tastes of science**, a project that accompanies the public in a cycle of workshops, conferences and shows which focus the attention on nutrition. Following the success of the 2006 edition, and thanks to Coop's contribution, **Science in the kitchen** returns: the guidance of a cook and a scientist help the public to discover the processes involved in the preparation of a dish.

The 2007 cycle of workshops and meetings is enriched with new ideas such as **The science of taste**, a mixture of events which highlight particular aspects of nutrition and nourishment, from the alcoholic fermentation of beer, with a real experiment, to the natural one of Pandoro, from a workshop on the importance of the time variable in nutrition to a conference of the food of the witches by **Giulio Giorello**, from a room of perfumes to a workshop on DNA in the kitchen, and even a swimming-nutrition conference with the Olympic Champion **Domenico Fioravanti**.

But the 2007 Festival will also have many other explorations: from the appointments with **On the crime scene**, in which the **Scientific Police** reveal a perfect detective's secrets to the public, swerving from biology to genetics, from chemistry-physics to Informatics, in an interdisciplinary mixture which aims to learn how prints are taken, how DNA exams are made and about drugs and how weapon matches are made; to meetings with **the Fire Brigade** directly in their station to help the kids learn why its best **(Not) To play with fire** in a guided course, in which they learn how to recognise the phenomena and risks tied to the various phases of a fire and concretely attempt to extinguish one with the means used daily by the fire brigade; running through the interactive courses promoted by **Federchimica** which lead the schools, through direct experimentation, to understand the unsuspectable contributions given by **chlorine** and **plastic** to our everyday life and the fun "energetic competitions" of **Not wasting: let's explore the various types of energy** and **A Guinness worthy bike ride**. In the first case, the public is divided into teams which challenge each other to choose among the different renewable sources which is the most apt to action various machines without producing waste harmful to the environment; in the second, a bike race, with the contribution of **Focus** and **Focus Jr**, which aims to enter the Guinness book of world records takes place on bikes connected to an energy accumulator, and generates electricity with the motion: two original methods to reflect on the alternative production of energy, on a conscious consumption and on respecting the environment.

To guide and inform the public there will be, as is traditional, the explainers, chosen from **university students, graduates, PhD students and young researchers**, taught to accompany the public in the fascinating voyage in discovery of the laws and mysteries of science.



The traditional strong point of the Ligurian event, the formation project and involvement of the Festival's scientific explainers, this year gains an international dimension, with the inception of **EASE – European Academy for Scientific Explainers** which sees the participation of, in the framework of the Twinning accord with the Shanghai Technology and Science Festival and in the framework of the new Association for Scientific Dissemination in the Mediterranean MASAD, Chinese students and others from the Mediterranean area.

To further consolidate the agreement of cooperation with the Chinese scientific and technological event goes the presence of the urbanist **Zheng Shi Ling**, responsible for the planning projects for the 2010 Universal Expo in Shanghai, the protagonist at the 2007 Festival of a lesson on the new frontiers of urban requalification.

CONFERENCES AND ROUND TABLES

Just as it does every other year, the **conference** programme proposes an interdisciplinary excursus by making use of international excellencies, in the fields of research and disseminatory reflection. The multiple dimensions of scientific **curiosity** are explored with a richness and a variety of contents that challenge the earlier editions, and the calendar of appointments is enriched by another original selection: **Vite appasionanti**, a cycle of meetings conceived and directed by **Simona Morini**, who places conversations, readings and stories in the informal frame of the scientific cafés side by side with the multimedia experiences in which the biographies of scientists who have made choices of ideas or in life which have brought them into contrast with others of the community are re-proposed with the help of music, video, film and theatre performances. Among these, there is the one done by **Lucia Poli**, the protagonist of **Libro e moschetto, scienziato perfetto**, which consists in an intense reading of Italian mathematics in the face of fascism in the events of the lives of **Vito Volterra**, **Francesco Severi** and **Mauro Picone**.

PHYSICS AND MATHEMATICS

The 2007 Festival has an exceptional international importance due to the presence of some of the most important exponents of contemporary physics. Among these is the Geneva CERN Nobel prize **Jack Steinberger** who, conforming to the extreme attention paid this year by the Genoese event to the controversial problem of the relationship between energy and environment, is the guest of a round table entitled **CO2: guilty or innocent?** which aims to investigate the prospect of the approach of a new ice age, caused by global warming, while **Freeman Dyson**, the visionary Princeton mathematic physicist, is the protagonist of a *Lectio magistralis* on the *six heresies* dominant in the fields of science and society – from America's global superpower to the gravity of climate change – which aims to show that hope is not only good for the health, but is also supported by proven scientific evidence.



The long term effects of energy consumption on our planet's climate are also at the heart of **Sylvie Joussaume's**, the director of the French National Institute of the French Universe (INSU CNRS), intervention and the appointment with the projection of ***An inconvenient truth*** (2007 Academy Award winning for best documentary) by Davis Guggenheim, introduced by **Carlo Alberto Ricci**, member of the Italian National Scientific Committee for Antarctic Research (of which he has been President from 2002 to 2006): the film, in which the ex-US vice-president Al Gore talks about the data and the predictions made by scientists on climate change, discussing its political and economic implications and illustrating the probable consequences of global warming if we don't intervene immediately and globally to reduce greenhouse emissions, follows a round table on the activities of Italian scientists in the frame of the international programmes for research on the climate.

The physicist and historian of science **Jean-Marc Lévy-Leblond** discusses the limits of scientific knowledge and of the common opinion according to which science may be the only one of the human creations with claims to universality and is beyond culture, language and the particular historic context, while **Lawrence Krauss**, the genial physicist and communicator who has investigated the most extreme science fiction ideas of physical research, is the protagonist of a conference on parallel worlds, hidden dimensions and regions of being which extend beyond our perception. The scientific bases of a plurality of worlds, each with its own different physical properties which mean that things which are impossible in our universe could happen in infinite parallel realities, are the subject of **Alex Vilenkin's** (physicist from Tufts Boston University, among the pioneers of contemporary cosmology) intervention in the Festival.

An important presence that bear witness to the recent progresses made in the fields of research and scientific awareness in the South of the World is brought to the Festival by **Almamy Konté**, Director of Research at the Ministry for Scientific Research in Senegal.

Less acclaimed, but no less important is the presence of the director of the "Annals of Improbable Research" **Marc Abrahams**, who brings some of his famous Ig-Nobel Awards to Genoa.

As is tradition the programme of meetings places foreign guests alongside important exponents of the Italian scientific panorama, showing the state of excellence reached by our country's research sector.



Scientists who have claimed the Festival as their own since its debut return to Genoa, such as the Quantum physicist **Francesco De Martini**, the physicist and historian of science **Enrico Bellone**, the president of the Interministerial Work Group for the Development of Scientific and Technologic Knowledge **Luigi Berlinguer**, the physicist and director of the magazine "Sapere" **Carlo Bernardini**, the logician **Achille Varzi**, the theoretical physicist from Trento University, **Sandro Stringari**, the cognitive science expert **Massimo Piattelli Palmarini**, the astrophysicist **Margherita Hack**, the astronaut **Umberto Guidoni**, the physicist **Federica Migliardo**.

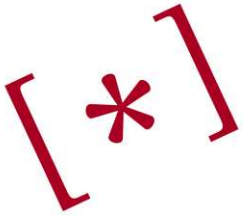
But the 2007 edition of the event is also the occasion for important new entries: among others there is the brilliant mathematician of Genoese extraction and Chancellor of Udine University **Furio Honsell**, who brings his fun theorems on mathematics and everyday life to the Festival, from the Flavio Briatore problem to Perry Mason's, from Sherlock Holmes' principle to Hamlet's; the Alpinist **Reinhold Messner**, the protagonist of a meeting, tied to the expositive course *Pole Position*, in which the stepping stones which have brought man to measure himself with the exploration of the immense frozen poles of our planet; the astrophysicist **Sandra Savaglio**, to whom the American weekly "Time" dedicated a cover, as the icon of the "Flight of European Brains" to the United States, who discusses the state of research in Italy, the physicist **Luigi Lugiato**, this year rewarded with the Max Born Award in recognition of his original research in quantum optics.

LIFE SCIENCES

After the celebration, in the 2005 edition, of the 150 years since the discovery of Neanderthal man, the birth of modern paleo-anthropology, the 2007 festival once again returns to the mysteries of human evolution, running through its steps with the voices of some of the most important worldwide exponents of the Life sciences.

Among these is the primatologist **Jane Goodall** who, introduced by the CNR Rome institute of Science and Technology expert **Elisabetta Visalberghi**, bears witness in Genoa to her pluri-decade long experience on the field with chimpanzees and gorillas, in search of the secret that renders monkeys so similar and yet so enigmatically different from us.

The Kenyan primatologist **David Mbor** will also speak of the inextricable relationships between man and primates, while the paleo-anthropologist from the American Museum of Natural History **Ian Tattersall** presents in a *lectio magistralis* the latest and most fascinating developments in research on evolution and the development of species with which *Homo sapiens* had, until very recently, lived with.



Another comparison between Man and animals is at the heart of **Giorgio Vallortigara's** conference, where he illustrates the principal characteristics of different species' sleep and some of the most recent studies in neurobiology and the psychology of sleep, in particular discussing the possible relationship between sleep and memory which have come out from research on lab rats, before a series of meetings dedicated to the analysis of the relationship between sleep and wake, curated by the Associazione Amici dell'Acquario.

The Genoa Aquarium also hosts some of the appointments of ***On Darwin's steps***, which aims to allow the visitor to relive, with the voice of the television presenter **Patrizio Roversi** who took part in the project, which, at two centuries distance, revisited the places which were the first inspiration of the Theory of evolution, the stages of the trip taken between December 2006 and May 2007 on the Adriatic ship on the tracks of the Beagle.

On the cultural front of evolutionism, the Harvard ethnologist and psychologist **Marc Hauser** brings his discovery of a possible universal moral grammar, which is shared by our closest relations, to the Festival, and the French biologist **Michel Morange** analyses the recent controversies on the different paradigms present in the life sciences, in particular after the completion of the mapping of the human genome.

The historian **Louis Godart**, the linguist **Tullio De Mauro**, the responsible for the LEM (Languages of Europe and the Mediterranean) project, **Henri Giordan**, and the delegate general to the French language and the languages of France **Xavier North** discuss the linguistic differences present in Europe and attempt to make us understand how these can still be considered a useful resource for the unification process of the "old continent".

A reflection on the multiple interpretative models of reality offered by the various scientific traditions is proposed by the round table ***Knowing and building our world***, with **Ernesto Illy**, the Innovation Minister **Luigi Nicolais**, the evolutionary economists **Giovanni Dosi** and **Doyne Farmer**, the biologist **Marco Ferraguti**, the philosopher of science **Giulio Giorello** and the philosopher **Carlo Sini**, moderated by the epistemologist and president of Alétheia **Franco Rebuffo**.

The analysis of the intimate connections and reciprocal influences between science and the news is the theme of ***Science on death row***, which takes its cue from the five Bulgarian nurses and the Palestinian doctor arrested in Libya in 1999 with the accusation of having voluntarily infected 426 children in the Bengasi paediatric hospital with aids.



The death sentence of six health operators has moved in their favour some of the most important exponents of the international scientific community, among which is 1993 Nobel Prize winner for Medicine **Richard Roberts** and the discoverer of the HIV virus **Luc Montagnier**, present in Genoa to run through the steps - coordinated by **Vittorio Colizzi**, the president of the National Institute for Infectious Diseases "L. Spallanzani" and immunologist of the Rome Tor Vergata University, the institution which contributed to the organisation of the meeting - of a case that has involved the world's public opinion.

Among the important personalities that intervene in the 2007 Science Festival for the cycle of meetings dedicated to the mysteries of the life sciences and the multiple therapeutic applications of the most cutting edge research in biotechnology, there are also the geneticists **Guido Barbujani**, **Edoardo Boncinelli** and **Luigi Luca Cavalli Sforza**, the evolutionary biologist **Alessandro Minelli** and the emeritus head Haematology doctor of the Azienda Ospedaliera Universitaria di Genova, **Alberto Marmont**.

HUMAN SCIENCES

This year the Science Festival section dedicated to the human science is particularly rich, with the exceptional presence of the American philosopher **Hilary Putnam**, the protagonist of a *Lectio magistralis* on scientific naturalism. The round table which sees the participation of the philosophers **Mario De Caro**, **John Dupré** and **David MacArthur** is dedicated to the concept of *pluralist naturalism*, which sees the philosophers at work in analysing the controversial relationship between biology and the comprehension of the human nature, the object of a wide-reaching intellectual debate, which contraposes the attitude of those that maintain that the human sphere can only be integrally explained by the natural sciences to those who refuse to trust in science's potentiality.

The intriguing present-day concept of consciousness, which is the object of study of many disciplines, and the questions which spring from it – does consciousness have a material basis? What distinguishes it from perception? What is the difference between the mind and the brain? – is at the heart of the confrontation between four internationally renowned members of the scientific community: the French philosopher **Michel Bitbol**, the Tibetan monk **Matthieu Ricard**, by formation a biologist and now the Dalai Lama's counsellor, the neuropsychologist **Salvatore Maria Aglioti**, and the biochemist **Pierluigi Luisi**, a long-time member of the Mind and Life Institute.



In line with the intricate mechanisms underlying language and self-consciousness, is the conference ***I think therefore I lie: the brain, the self and the deception***, a conference by the neuroscientist **Julian Paul Keenan**, the director of the Cognitive Neuroimaging laboratory of Montclair University (USA), while **Aldo Naouri**, the paediatrician, psychoanalyst and expert on family relationships, in his Festival intervention investigates the **adultery** phenomenon.

As always the Italian guests are extraordinary, chosen for the originality of their current research and the way that they will face the theme of *curiosity*: among others there will be the Padua University expert in general Pathology **Cesare Montecucco**, the political philosopher **Gian Enrico Rusconi**, the Chancellor of the Pisa Normale **Salvatore Settis**, the economist **Stefano Zamagni**, the science philosophers **Mauro Dorato** and **Giulio Giorello**, the historian **Aldo Schiavone**, the neuroscientist and robotics expert **Domenico Parisi**, the psychotherapist and human behaviour student **Gianna Schelotto** and the historian **Eva Cantarella**.

SHOWS AND EVENTS

As is traditional, the Fifth edition of the Festival also proposes a selection of shows to help **the general public's approach to the world of research** by also using **the inspiration of the stage**: numerous original and transversal performances raise the curtain on the many "spectacular", lucid, everyday, social, customary, faces which scientific research can wear.

Exclusively at the Genoa Science Festival **Frans Lanting**, the globetrotting photographer whose shots are the protagonists of the *Life* exhibition dedicated to the mysteries of the origins of life on Earth, presents ***Life. A journey through time***: the European première, by the Turin Philharmonic Orchestra directed by **Carlo Boccadoro**, of a multimedia symphonic concert composed by **Philip Glass**, with **Michael Riesman's** orchestra arrangement and **Alexander V. Nichols'** visual design, produced by the Cabrillo Festival of Contemporary Music directed by Marin Alsop. In this concert, realized with the contribution of ERG, art, science, photography and music are fused into one to give birth to a new lyrical interpretation of our planet's evolution, from its origins to today.

Another exclusive première is the journalist **Corrado Augias'** return to theatre with ***Reason's flame***, a lesson-show dedicated to the figure of **Giordano Bruno**, the symbol of an unconditional passion for scientific and philosophical research and the courage of facing an atrocious death rather than retracting his reason and ideas.



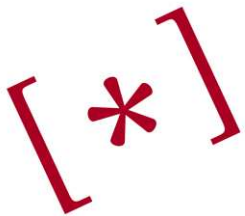
The controversial figure of the scientist and the dilemma of responsibility and the choice of conscience are at the heart of ***Faust in Hiroshima***, an original reading in the form of a musical show of the invention of the atomic bomb through the events of Goethe's Faust. In the *pièce*, the nuclear development is narrated through the dramatic story of the physicist **Joseph Rotblat**, a Polish Jew, 1995 Peace Nobel, who was initially part of the Manhattan project of creating the first American atomic device, but successively left for ethical reasons, becoming one of the first eleven signatories of the **Einstein-Russell Manifesto** on the risks to humanity derived from the existence of nuclear weapons.

The double value that scientific discoveries can assume is the theme of ***Time's up, Doctor Semmelweis!***, which tells the story of the tests by the Doctor **Ignàc Semmelweis** to isolate the causes of an epidemic of purple fever which broke out in 1846 in the first maternity ward of Vienna's general hospital and the exploitation of the results that his adversaries successively used to confirm the traditional explanations based on telluric influxes, forcing Semmelweis to suicide.

Exclusively for the Science Festival, a quartet of internationally renowned musicians - **Enrico Rava, Furio di Castri, Jon Balke and Patrice Heral** – propose ***Space is the place***, an original show in which musical writing and improvisation look at the moon, the Solar System, space voyages and extraterrestrial life lying somewhere in between the folds of mythology and scientific reality, moving smoothly between samples, jazz, grooves and sound suggestions.

Among the spectacular events in programme, on the borders between botany, science and poetry there is ***Page: Emily Dickinson's Herbarium***, an exhibition show with an **exhibition** of reproductions taken from the American poetess' herbarium – a taxonomy of other **400 plant species**, a scientific inventory of remarkable accuracy as well as a material metaphor of the love of nature which transpires from Dickinson's numerous lyrics – accompanied by an intense evocation of the writer's private universe with an original monologue by **Martina Massari** performed by **Federica Cassini**.

Alongside the new productions and the exclusive events, ***Circuscience***, the by now traditional appointment where acrobats and jesters challenge the laws of physics, returns to the 2007 Festival and this year proposes a fun and instructive workshop of street circus, with balancing acts, games and acrobatics and a new production of contemporary circus,

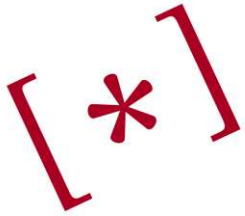


A full selection of other occasions for kids and adults where science puts itself onstage for fun and curiosity completes the programme. Among these are **Traces. Physics' show**, a stage project conceived by three real scientists from Milan University to lead the public in discovering the enticing world of research; the ironic text on the fate of researchers called **Bankruptcy auctions, free scientists** written by Davide Pozzi, a university researcher and winner of the last edition of *CO_sienze*, the Naples Stabile d'Innovazione Ragazzi le Nuvole theatre competition for new scientific scriptwriting; the Tosse theatre's **Return to III B class**, an ironic and earthy mise-en-scène about the psychological mechanisms which take place among the school desks.

Dedicated to the smallest among us, instead, is **The spectral Band's fantastic adventure**, to accompany them in the playful discovery of the phenomenon of seeing colours and **Dr Molecule**, the hilarious science show which takes place everyday, produced by the Bloomfield Science Museum of Jerusalem and a prize winner at the last edition of Wonders.

THE FESTIVAL ON THE NET

Coherently with the particular attention that the Genoa Science Festival has dedicated to the latest frontiers in communication and the most innovative approaches to scientific dissemination, the 2007 edition opens itself out to the Internet universe, with the launch of **Blogger Project**. A team of **six** nationally renowned **Genoese bloggers** will follow the Science Festival from its set up to its conclusion, telling its story in the first person and in a non-institutional way. The virtual arena created online is accompanied in the days of the event by the physical space for discussion represented in Genoa by the **Blog Area**, a collector for the bloggers passing through the city, an open space for whoever wants to connect the Net and actively participate in the "big conversation" which animates it, in which daily one or more of the Festival's protagonists, as well as figures known and interesting in the national and international Web Culture, meet the bloggers and undergo the "crossfire" of their questions, in their turn proposing presentations, slideshows, films.



THE FESTIVAL IN LIGURIA

After the success of the 2006 edition, the Science Festival consolidates its presence on the Ligurian territory, giving rise to a series of sections which have come to make a Festival within the Festival. From the western edge of **Sanremo**, which the event reaches for the third consecutive time, to the eastern edge of **Lerici** and **Spezia**, there are around twelve Ligurian municipalities which host workshops, meetings with scientists, conference-shows and creative workshops.

Among the major events, we mark out the laboratory-exhibition ***I ascend the tower to see what's out there***, with a section dedicated to the hyposeeing public and the Sanremo physics-musical workshop ***Physix 'n Roll***; the Bogliasco ***Surf Science*** project, which puts scientists and surfers side by side in a series of initiatives which aim to tell the story of the relationships between these two worlds which are apparently as distant from each other as could be. The exhibition, entitled ***The inspector Folaga***, of a submarine robot in the unusual, inspiring backdrop of the **Sori** communal swimming pool. The rich **Spezia and nearby municipalities**' programme also proposes an articulated calendar of conferences and meetings with scientists and disseminators, among which the names of **Luigi Luca Cavalli-Sforza**, interviewed by **Dario Vergassola**, and **Roberto Vacca** stand out, as well as that of the MIT oceanographer **Enrik Schmidt**. In the hinterland, the **Busalla** workshop ***The kitchen of energy*** returns, in a new form; presenting a fun and educational trip into the transformations of oil, from the well to bubbles.

Further informations and detailed programme of the events are available online at www.festivalscienza.it/en/home.php



Under the auspices of the President of the Republic of Italy

The Genoa Science Festival is organised by

Science Festival Association

Camera di Commercio, Industria e Artigianato di Genova, CNR - Consiglio Nazionale delle Ricerche/INFM – Istituto Nazionale di Fisica della Materia, Codice. Idee per la cultura, Comune di Genova, Confindustria Genova, Costa Edutainment, Dixet – Distretto Elettronica e Tecnologie Avanzate – Club d'Imprese, Fiera di Genova, INFN - Istituto Nazionale di Fisica Nucleare, INSTM - Consorzio Interuniversitario per la Scienza e la Tecnologia dei Materiali, Provincia di Genova, Regione Liguria, Sviluppo Genova, Università degli Studi di Genova

Direction and organization

CNR – Promozione e sviluppo collaborazioni, INFM
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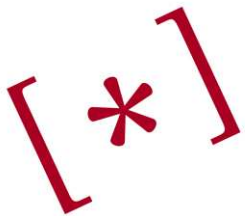
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USEFUL INFORMATION

Information and Booking

Daily ticket (valid on the day of issue till midnight)

9 euro Adults

7 euro Groups of 10 people or more, schools, boys and girls from 6 to 18 years old, students (with university card), seniors (65+) and disabled

Festival pass (valid during the whole Festival period)

17 euro Adults

14 euro Groups of 10 people or more, boys and girls from 6 to 18 years old, students (with university card), seniors (65+) and disabled

10 euro School groups

Groups: 1 free ticket every 20 people.

Free admission for children under 5 years old and for teachers guiding their group of students.

Ticket includes accession to any Science Festival event (excepted those marked as "fuori abbonamento") until all available seats are taken.

Special Offer - Weekend

A special price pass available only for the guests of the Hotels that have an agreement with the Science Festival (14 euro instead of 17 euro).

Special Offer - Families

Two adults ticket + two children tickets + a free ticket (a free ticket for every two purchased for children under 12 years old).

Infoline

Infoline: tel + **39 010 6591013**

From Monday to Thursday 9 a.m - 1 p.m and 2 p.m. - 4p.m.

Friday: from 9 a.m to 1 p.m.

For schools: tel +**39 010 6598718**

From Monday to Thursday 9 a.m - 1 p.m and 2 p.m. - 4 p.m.

Friday: from 9 a.m to 1 p.m.

Bookings

Starting from 17th Sept. you will have the possibility to book your visit to the festival making a reservation on the website www.festivalscienza.it



Phone reservations at the **+39 010 2345690**, for schools and groups only, from 17th Sept. to 24th Oct., from Mon to Fri, from 9:00 am to 1:00 pm and from 2:00 pm to 6:00 pm. From 25th Oct. to 5th Nov., every day from 9:00 am to 1:00 pm and from 2:00 pm to 6:00 pm.

For schools and groups booking is free and required (maximum 3 bookings per day).

Individual visitors: booking is recommended but not required.

Booking fee for every single event:

- > in days preceding the date of the event: **1 euro** (you'll pay booking fee online or at the Festival's Infopoints);
- > on the day of the event: free, if the ticket is bought directly at Festival's Infopoints.

Science Festival... "curiosity" [3 days – 2 nights]

The package includes:

- > Science Festival Pass;
- > 2 nights accommodation in a 4-star (or 3-star Superior) Hotel in Genoa (breakfast included);
- > the "Genoa Museums Card" valid 48 hours and giving access to 22 municipal, private or stately owned museums in Genoa;
- > special ticket "secret path", giving access to the Aquarium of Genoa and giving you the chance to discover the secrets of fish tanks guided by a biologist.

Package cost per person:

180,00 euro Adults

26,00 euro Children (6-12 years old in 3rd/4th bed)

service cost: 25,00 euro.

On demand:

- > Half Board option in hotel and/or restaurant;
- > Taylor-made packages.

Info and bookings:

+39 010 2345666

info@incomingliguria.it



Special offers for schools

Booking

For schools and groups booking is required: from September you can book your visit to the Festival directly on the website www.festivalscienza.it or by calling **+39 010 2345690**.

Infoline schools: tel. **+39 010 6598718**, from 17th September, Monday to Thursday, 9 a.m. - 1 p.m. and 2p.m. - 3 p.m.; Fridays from 9 a.m. to 1 p.m.

Costs for Schools

7 euro Daily ticket (cost for every student)

10 euro 13 days Festival pass (cost for every student)

Free admission for teachers guiding their group of students. Ticket includes accession to any Science Festival event (excepted those marked as "fuori abbonamento") until all available seats are taken.

Genoa and the Science Festival - Package for Schools

Package cost for every student: **66,50 euro**

(Cost valid for a minimum of 25 paying students)

Free package for teachers: 1 free package every 15 paying students in double room.

Package valid from 25th October to 6th November 2007.

The package includes:

- > Science Festival Pass;
- > 1 night Half-Board accommodation in a 3-star Hotel in Genoa;
- > walking City-tour of Genoa.

Package valid from 25th October to 6th November 2007.

Info and bookings:

+39 010 2345666

info@incomingliguria.it



The Science Festival: its origins

The Science Festival was born in Genoa in 2003, where it was conceived and organised by the **Science Festival Association** – founded by **Codice. Idee per la cultura** and by the **INFN-National Institute for the Physics of Matter** (now part of the CNR) – and now joined by the Genoa Municipality, the Genoa Province, the Liguria Region, the Genoa University, as well as entrepreneurial and category associations, national and private research institutions. The event immediately displayed a precise disseminatory intent, well defined in the first edition's slogan ***It's easy to understand why***. From the beginning the Festival showed that it was an original meeting-place between the most cutting edge research and every common citizen's thirst for knowledge and curiosity, as well as an important occasion for dialogue and the creation of synergy among the most diverse scientific disciplines.

The programme is consequentially articulated, from its very beginning, to satisfy different levels of fruition and to propose itself to an extremely varied public, both in terms of age and competencies. From its very first edition, the Festival can count on the presence of two partners – **Telecom Progetto Italia** and **Compagnia di San Paolo** – who take up the role of positive interlocutors and co-conceivers and contribute in a determinate manner to the event's success.

The 2006 edition's numbers

- **250.000** visits in the 13 days of the event;
- **350** events among conferences, exhibitions, meetings, multimedia exhibitions, shows;
- **563** explainers and scientific explorers assisted and accompanied the visitors through the days of the events;
- **250** credited journalists;
- **30** television stations and **30** radio stations gave voice to the Festival's various contents;
- **60.000** tickets sold, counting subscriptions and day-tickets



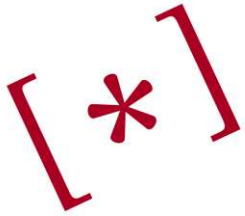
THE FESTIVAL'S HISTORY FROM 2003 TO 2006

2003: "BEYOND"

In its **first edition, from the 23rd October to the 3rd November 2003**, the Science Festival faces the theme of the interdisciplinarity of research, condensing the concept of a scientific culture in continual expansion into the key word ***Beyond***. From the very beginning there were *Lectio magistralis* by important exponents of the scientific scene – from the evolutionist **Niles Eldredge** to the palaeontologist **Ian Tattersall**, from the geneticist **Luigi Cavalli Sforza** to the biologist **Edoardo Boncinelli** and the astrophysicist **Margherita Hack** – alternated with unusual and original reflections (such as the extremely well received conference on the science of Harry Potter) and suggestive theatrical performances such as Michael Nyman's work ***The man that swapped his wife for a hat***, based on the book with the same name by the neurologist-writer Oliver Sacks. The proposal of original interactive exhibits are conceived – from ***Simple and Complex*** to ***The wonders of science*** – which will become one of the Festival's identifying factors and a model successfully exported to the rest of the world. From this first edition the Genoese event shows its ability to attract the public, with a total of **136 thousand visits** in the twelve days of the event, clearly showing that an interest in science can be a mass phenomenon. The internet community also praises the event: **the website, www.festivalscienza.it**, registers, between October and November, more than **two and a half million contacts**.

2004: "EXPLORATION"

In its **second edition, from the 28th October to the 8th November 2004**, which is inserted in the frame of official events of "**Genoa European Capital of Culture**" and inserted into the events recognised by the European Union in the context of the European Week of Scientific Culture (ESW), the Science Festival faces the theme of ***Exploration***: from the new frontiers reached in the most disparate fields of research to the progressive tendency in many sciences to leave their specific, specialised boundaries and to confront themselves with other fields. The programme is enriched by numerous special events, shows and performances, and gains a greater international viewpoint from the launch of the **Esciental** network, which brings exhibitions and workshops by different European institutes involved in the communication of Science in a museum context to Genoa. In the second edition of the festival among others there were the mathematician **John Barrow**, the anthropologist **Marc Augé**, the neurobiologist **Semir Zeki**, among the first to theorise an indissoluble relationship between art and science, and the cognitive scientist **Jean-Pierre Changeux**, one of the absolute fathers of the "mind sciences".



To underline an evermore diffused tendency, the presence of researchers that have made the crossing from pure essay-writing to narrative activity is intensified: among these is the chemist **Carl Djerassi**, the inventor in the Fifties of the anti-conception pill and then the author of novels and plays, who presented a piece in Genoa dedicated to *Sex in the age of mechanical reproduction*.

Participation increases by 21 per cent in this edition, touching the number of **165 thousand visits**. Among the most followed events is the exhibition **Leonardo da Vinci and music**, a voyage to the discovery of one of the least known aspects of the polyhedral geniality of this artist-scientist, using an exhibition of musical instruments invented by him and rebuilt on this occasion and inserted into an interactive environment which recreates, through games, acoustic experiments and audiovisual projections, the suggestions of the Renaissance's cultural universe.

2005: "FRONTIERS"

The **third edition of the Science Festival, from the 27th October to the 8th November 2005**, is dedicated to the key theme of **Frontiers**, in the sense of the meeting points between the known and the unknown, of the limits which must continuously be moved back, of boundaries and thresholds of different forms of knowledge, constantly to be overcome by new forms of interdisciplinary research. To ideally close the World Year of Physics, proclaimed by UNESCO to celebrate the centenary of Albert Einstein's relativity, the event is inaugurated by lectio by the 1998 Nobel prize for Physics, Robert Laughlin, and also presents interventions, among others by the cosmologist **Martin Rees**, by the mathematician father of fractals **Benoit B. Mandelbrot**, by the pioneer of postgenomics **Craig Venter**, by the *third culture* theorist **John Brockman**.

Among the special events, mention most go to the **world premiere** at the Science Festival of **Peter Greenaway's *The sons of Uranium***: a musical, theatrical project made up of installations on eight of the most famous "sons" of uranium (who foresaw the discovery, made it possible, exploited its applications, and suffered its consequences) and the exhibition ***Water Air Earth Fire*** dedicated to the four elements, which involved artists, scientists and musicians in the attempt to evoke, by intertwining courses and languages, the primordial energy of nature. The 2005 Festival sells **50% more tickets** than 2004, for a total of **216 thousand visits**. More than **27 thousand people, mostly kids**, visit the interactive workshops at the Magazzini dell'Abbondanza: the peculiar and winning formula of the exhibitions on program is always that of the hands on approach, in which the public can touch with their own hands and verify on their own the validity of scientific theories, interacting with objects and situations to "learn by doing".

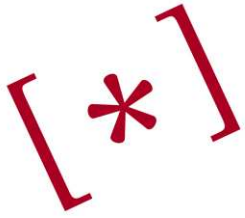


2006: “DISCOVERY”

In its **fourth edition**, from the **26th of October to the 7th of November 2006**, the Science Festival faces the key theme of **Discovery** and gains a further international ennoblement with **UNESCO’s** decision to celebrate the **World Day of Science for Peace and Development** in Genoa on the **7th of November**, the final day of the event, organised with **IPSO (Israeli-Palestinian Science Organization)**. The Unesco appointment is the ideal coronation of a programme which is particularly rich with appointments and new events, which sees **three Nobel prize winners** participate – **Theodor Haensch**, the 2005 Nobel Prize for Physics, **Daniel Kahneman**, 2002 Nobel Prize for Economics, **Torsten Wiesel**, the 1981 Nobel Prize for Medicine – as well as personalities which have made the history of research and scientific dissemination, from the physicist **Fritjof Capra** to the French Science Academy president **Edouard Brézin**, to the quantum cryptography theorist **Artur Ekert** to the physicist **Lisa Randall**, a great expert in string theory and in its possible implications on the number of dimensions of the universe in which we live, from the polyhedric biologist **Robert Trivers** to the semiologist **Umberto Eco**.

Once again, the world of research speaks to the great public using the suggestive frame of the stage. Among the proposed shows, the unusual re-reading of the world of numbers (and not only numbers) **Mathematician and impertinent. Science in the show of the future**: a “show for lights, sounds and dreams” with the mathematician **Piergiorgio Odifreddi** in the leading role, loosely based on a collection of essays, articles and meditations by the volcanic researcher, somewhere between science, religion, current events in politics, language and literature.

Among the most followed expositive events is **Matefitness**, the first Mathematic Gym, where you could learn how useful and how much fun numbers are in so many everyday circumstances, by facing personally games, experiments, riddles, mind gymnastics and other original interactive activities and the suggestive exhibition **Mirrors**, a spectacular interpretation – using the most advanced experiments from research laboratories, interactive modules to understand how the reflection of light works, works of art, both cinematographic and photographic, in depth studies on the behaviour of children and animals – of the theme of the mirror, which has always been a paradigmatic tool of scientific research and philosophic speculation on the Self and the Other. The edition closes with **record** numbers: the attendance is **250 thousand visits** and more than 60 thousand tickets sold.



Friends of the Science Festival

"Friends of the Science Festival" was conceived as part of the Science Festival. It is an **association open to men and women, groups and schools** whose aim is to make it easier for the general public to be involved and to become a protagonist of the event.

Friends of the Festival are people with a **great passion and curiosity for Science**. They consider the Festival as an exceptional occasion to deepen topics they are interested in, and a **chance to talk with international experts** in the field of Research.

The "Friends" can benefit of **several special conditions** such as: **free booking** for all Festival's events, **personal pass** valid during the whole Festival period, **price reductions**, **participation in initiatives organised throughout the year** and **invitation in special occasions**, such as dinners or talks with internationally renowned scientists

Friends of the Festival also take care of the **accommodation of scientists and speakers** in different families. It is a successful initiative confirming **hospitality traditions** that Genoa has showed since **Rolli** family times.

The President of the Association Friends of the Science Festival is **Caterina Fasolini**.

You can become a Friend of the Festival separately or in group, through associations, clubs or enterprises. **Schools can join for free** and assume a leading role by **asking to present a conference**, to **interview** a particular scientist (these initiatives are restricted to high schools) or **hosting students coming from another city** to visit the Festival, and organizing with them **educational meetings** with lecturers and outstanding people.



Festival's Explainers

Genoa Science Festival 2007 launches the school for professional explainers **EASE – European Academy for Scientific Explainers** (www.ease.infm.it), an European network structure for the **training of scientific explainers**. Its main goal is the **support to scientific dissemination at the international level**. In the framework of the Twinning accord with the Shanghai Technology and Science Festival and in the framework of the new Association for Scientific Dissemination in the Mediterranean MASAD, **EASE – European Academy for Scientific Explainers** sees the participation of Chinese students and others from the Mediterranean area.

Genoa Science Festival would not be the same without the scientific explainers. Thanks to them every visit to the Festival becomes a chance for everybody to learn something. Festival's explainers are a **group of 650 girls and boys** -graduated students, students having obtained their high school diploma or now attending university - chosen among more than 900 applicants. They follow a **theoretical and practical training course**, attending lessons going from the methods of diffusion of science to the different ways of expression and taught by professors coming from the worlds of research, communication and theatre. Among them: **Leonardo Alfonsi, Enrico Bellone, Massimiano Bucchi, Frank Burnet, Pietro Greco, Guglielmo Maglio, Giulio Peirone, Annamaria Testa**.

The activity of the explainers is possible thanks to **Camera di Commercio di Genova**.