

Festival della Scienza Horizons

Genoa 29th october_ 7th november 2010 | www.festivalcienza.it



**Broaden your horizon,
there is always so much to learn**

Martin Scorsese

Horizons: the key word for the 2010 Genoa Science Festival. Horizons: an unattainable line, the ideal metaphor of science which relentlessly pushes us towards what is new, unknown and unpublished. Horizons of the mind, life, matter and of the cosmos, horizons created by new technologies and forms of communication, developed as physical plans or mental attitudes which limit possibilities while encouraging us to overcome all boundaries.

This preview picks up only a few of over three hundreds events which will fill squares, historical buildings and museums in Genoa. A mix of meetings, exhibitions and workshops to involve our visitors in a fantastic trip in the mark of curiosity, to discover and share the beauty of knowledge.

Exhibitions

Diving into the Mediterranean Sea

Thanks to its wealth of aquatic fauna, the Mediterranean Sea is considered to be a hotbed or an incubator of biodiversity. However its delicate balance is threatened by the exploitation of its natural resources, climate changes and pollution. How can we save this natural heritage?

Organized by Museo Civico di Storia Naturale "G. Doria", Genoa

Electri-City

Wind power, sun power and biomass: will new technologies make it possible to have a city powered exclusively by renewable sources of Energy? What is the environmental and urban impact of these technologies? An exhibition on the possible lay-out of the city of the future, a green city based on clean electric energy.

Organized by Ansaldo Sistemi Industriali Spa

Exchanges in darkness

Moving around relying on touch, hearing, smell and taste. Beyond the thin line that divides light from darkness there is a new way of 'seeing' the environments of our daily lives. A strong emotional impact, the experience highlights a switch in roles and an elimination of barriers.

Organized by Istituto David Chiossone

Laser. Light beyond horizon

It penetrates the darkest of dark skies. It cuts, engraves and welds metals, measures distances and speed with great accuracy, eliminates eyesight faults in a thousand of a second: thanks to its amazing potential, the laser beam has made its way into our everyday life. The features and properties of the very slim energy bearing beam could one day light the Sun on Earth will be displayed...

Organized by CNR PSC – Promozione e Sviluppo Collaborazioni

Mediterranean on the Move

Amazing natural sculptures populate the sea-beds of the Mediterranean: which and how many secrets does the bottom of the sea conceal? A journey and a useful guide for the future, a glimpse into never-ending evolutions and changes that the Mediterranean has undergone over geological eras.

Organized by INGV – Istituto Nazionale di Geofisica e Vulcanologia

Mediterranean Science Garden

A science garden to discover the biodiversity of the Mediterranean environment and observe plant species and varieties at close quarters, especially those that play an important role in the traditions and cultures of many Mediterranean countries. A natural and cultural heritage to preserve for future generations.

Organized by CNR, Orto Botanico dell'Università di Genova and Associazione Festival della Scienza

Odyssey

Setting sail on the Mediterranean Sea in search of the roots of scientific and philosophical knowledge. How did the cities on the Mare Nostrum contribute to the development of Western Scientific thought? Greece, Libya, Egypt, Turkey and Italy: the ideal destinations for a journey into the history of science.

Organized by CNR PSC – Promozione e Sviluppo Collaborazioni



The Universe is not what it used to be

The discovery of cosmic rays, of invisible elementary particles of matter have led to the discovery of the Universe in a new perspective. The question is whether our knowledge can describe the world just before the Big Bang: we could discover other dimensions, the secrets of evolution and the origin of the Universe...

Organized by INFN – Istituto Nazionale di Fisica Nucleare

Towards the Horizon / The travels of trade and people: Near East to the Ancient Mediterranean

The world seen from another perspective, with the eyes of those who look at the horizon and the journeys that follow. The people of the Ancient Mediterranean and the Near East and their migrations, how their culture was shaped by their meetings with other civilizations. A way to rethink and appreciate intercultural exchange and develop a new notion of a horizon, travelling and meeting.

Organized by CNR – Istituto di studi sulle Civiltà dell'Egeo e del Vicino Oriente

3D Giotto: a virtual tour of the Franciscan chronicles

Have you ever walked into a Giotto fresco? You can: 'The Confirmation of the Franciscan rule' becomes a 3D environment which you can explore just by moving a part of your body, thus joining Francis's disciples gathered opposite Pope Innocent the 3rd to receive his approval for the new Order. The comparison between the original fresco and this representation will highlight the imperfect use of perspective which was finally solved about a century after Giotto's work.

Organized by CNR – Istituto per le Tecnologie Applicate ai Beni Culturali and Istituto di Scienze e Tecnologie della Cognizione

Your Green Day

Saving the planet is the result of our daily actions: let us lose ourselves wandering in a maze of choices, coming to terms with our behaviour, seeing how simple but far from our daily lives it is to live in awareness, according to principles of sustainability.

Organized by Associazione culturale Amigdala, L'emozione della scienza

Special events

A Taste of Science

Conferences, workshops and scientific aperitifs on food and drink: an appointment you can't miss with the Science festival, where taste and curiosity are blended together forming a mixture with a high scientific content. Come and taste a bit of science!

Organized by Associazione Festival della Scienza

Incredible Enel: Energy as you have never seen it / Enel brings new Energy to town

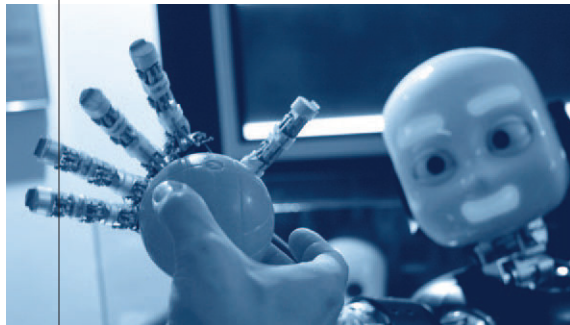
The tour which displays energy in all its forms is back in Genoa: games, events, debates, scientific experiments and interactive exhibits for a unique taste of scientific popularization. The Energy Shop, the Electrifying Arena and the Energy Bingo with Patrizio Roversi and lots more to teach youngsters what fun energy is and how it can be best used. Energy invites you and amazes you!

Organized by Enel

The computer science magic show

Science, lots of science, can hide behind a 'magic trick', the same sort that makes a computer work. Let yourself go into the arms of our scientific magicians and you could discover they are the same as the tricks your PC uses to leave you gobsmacked day after day.

Organized by Queen Mary, University of London and DISI, Università di Genova



Performances

Icaro ai confini del tempo

Based on a book by Brian Greene. Music by Philip Glass. Script adapted by Brian Greene and David Henry Hwang. Video installations by Al Et Al. Philharmonic Orchestra 900 of the Teatro Regio of Turin, directed by Ezio Bosso. Narrating voice: Sonia Bergamasco

The project was made possible tank to ERG

From the story written by the physicist Brian Greene, a poetic adaptation for the opera able to lead even the youngest audiences to the rules of astro-physics. A tale which stages one of Albert Einstein's greatest intuitions and takes you by the hand helping you discover the depths of space and of its laws. The performance is produced by the World Science Festival of New York and by the London Southbank Centre in collaboration with the Royal Society. The Genoa Science festival co-produced the Italian adaptation.

World Premiere at the World Science Festival 2010 and European premiere at the Southbank Centre 2010. Italian premiere exclusively for the 2010 Science Festival

Organized by Codice. Idee per la cultura

Il Viaggiatore Onirico

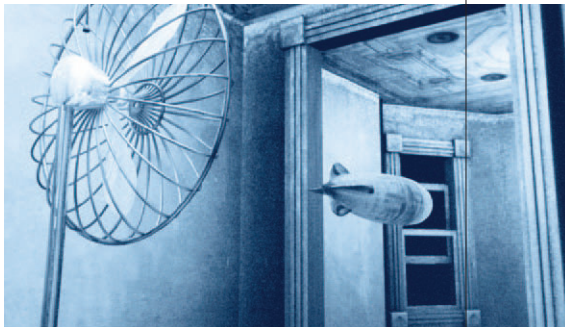
Text by Emanuele Conte from Boris Vian. Actors from the Teatro della Tosse Company

After having studied the best of all possible worlds with Candide and the future-past with 2984, both by-products of the Science Festival, which have been on tour in Italian theatres, this time we are dealing with the Dream World. The exploration starts with Boris Vian's novel Autumn in Peking which is the story about Amadis Dudu who catches a bus every day to go to work and who ends up in a parallel world called Exopotamie.

OrizzonTale / Circoscienza 2010

With Alessandro Benvenuti. Directed by Boris Vecchio. Script by Marco Odino. Music by Furio Di Castri. A Science Festival Production, co-produced with the Théâtre de Grasse

The new CircoScienza production tells the story of a traveller, a man who travels, stops looks and.... maybe never leaves but certainly arrives. The music score sets the pace of a poetic narration that has the voice and face of Alessandro Benvenuti, one of the most desecrating and ironic actors in Italy. On stage, Furio Di Castri at the double bass and Rita Marcotulli at the piano. A balance of circus games acts as the geography, the lay-out of the stage with OrizzonTale, evoking the ephemeral and subtle sense of moving beyond.



Workshops

A glance beyond visibility

Throughout the ages, scientists have tried to venture beyond the limits of their gaze, making the tools and instruments needed to observe the great and small alike. In our day and age increasingly sophisticated techniques make it possible for us to explore nature as never before, but building a microscope with Lego bricks is not so impossible...

Organized by CNR – Istituto dei Sistemi Complessi, Firenze, Istituto di Biofisica, Genova and Istituto Nazionale di Ottica

Ancient Horizons

For Neolithic human beings sailing the seas was a feat of strength and perseverance but what drove them to embark in such a dangerous adventure? The search for new contacts and materials to improve their living conditions contributed to the development of the great trade network of the Mediterranean.

Organized by Museo di Paleontologia e Mineralogia - Comune di Campomorone (GE)

Cartoon Science

Physics and physiology meet creativeness: several small film sets and lots of characters that will come to life using the frame by frame animation technique. What can you expect? Becoming a director of a successful short cartoon!

Organized by Attilio and Matteo Valenti, CNR PSC - Promozione e Sviluppo Collaborazioni, Associazione Festival della Scienza

Cloud-catcher

'They are coming, they're going and sometimes they linger...'
Catch them, it's enough for you to stretch your hand! Looking at the sky and touching it is not a feat just for artists or scientists: this workshop will take the young ones for a walk among cirri or cumulonimbi, will help them recognise them and... catch them with a 'Cloud-catching Kit'

Organized by Associazione Prospettiva Ranocchio

Plastic: a material at our service

Versatile, resistant and coloured: plastic is a precious material which has contributed to improving the quality of our lives. It was first made in the past century and it soon established itself thanks to its unique properties. The question is how much does plastic count in terms of energy efficiency, safety and resource management? What is its role in sustainable development?

Organized by Federchimica - Plasticseurope Italia

Sound Horizons

Musical scales are the structure which music rests on: every civilization on earth has made different choices, which has led to musical scales being created in Europe, China, Africa and ancient Greece, each one with its own scale and a different musical nuance. What will the musical scales of the future sound like?

Organized by CNR - Istituto di Nanoscienze, Centro S3, Modena

Sport and Science

Following the success of the 2009 edition, the appointment with science and technology underlying sport is back: this year lots of room for swimming, diving, water polo, free-diving and surf to take a plunge in the Mediterranean.

Organized by Associazione Festival della Scienza

Steminabilia

What is the task of the stem cells circulating in our blood? What therapeutic prospects do they offer us? Let us discover it in a coloured and amusing path, among red and white blood cells and platelets.

Organized by Centro Nazionale Sangue, Area Comunicazione and Centro Nazionale Trapianti

Taming the Infinite

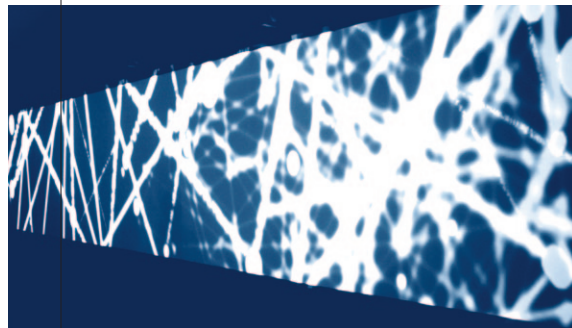
Vanishing points, shadows, perspectives, sums of infinite series, fractals: to what extent do we know how to tame the infinite and its mathematical features? The answer to this question could open the doors to our understanding the geometry of the Universe.!

Organized by the Centro "matematita" - unità di Milano Città Studi

Underwater horizons

Getting acquainted with the Environmental Heritage of the Mare Nostrum is the first step in saving it from environmental dangers. Let us wear cylinders, a torch and a slate and let us virtually immerse in a universe of sounds and colours, among the seabed dwellers and their amazing seascapes.

Organized by Paolo Assandri, Maria Paola Ferranti, Gabriella Minetto



Lectures

Cutting edge science, advanced research in biology, medicine, and neuroscience will be presented by our many guest speakers including Funmi Olopade, Vanessa Hayes, Pierpaolo Pandolfi, Paul Bloom, Semir Zeki, Susie Orbach, Alva Noe, Hermona Soreq and Rashika El Ridi. Marc Bekoff, Irene Pepperberg and Giorgio Celli will concentrate more specifically on recent ethological studies. Light, matter, energy and technology will be the object of a number of lectio magistralis by James Barber, Bunker Roy, George Saliba, Stewart Brand, Esther Dyson and Peter Atkins, while the Universe will be described by the voice of the 2002 Physics Nobel Laureate Riccardo Giacconi, by the director of the Specola Vaticana José Funes and by Paolo De Bernardis. Lastly, the mathematician Ian Stewart, the philosophers Ermanno Bencivenga and Piero Boitani will speak as will the art critic Hans Ulrich Obrist and the economist Nassim Nicholas Taleb.



Tickets and purchase

General public

Daily ticket

(till midnight of the day of issue)

Adults: 12 euro

Concessions: 10 euro

Young persons (6 to 14): 8 euro

Children (0 to 5): free

Festival ticket

(entry for the duration of the Science Festival)

Adults: 18 euro

Concessions: 15 euro

Young persons (6 to 14): 12 euro

Children (0 to 5): free

Premium Festival Ticket

A special ticket for all the Science Festival with unlimited and free booking: 25 euro

Schools

Daily ticket

(till midnight of the day of issue)

8 euro

Festival ticket

(entry for the duration of the Science Festival)

12 euro

General informations

Tickets allow entrance to all events of the Science Festival – except those listed as 'fuori abbonamento' – (not included in the Festival ticket) limited to seat availability and for the duration of the Festival.

Individual visitors are advised to book – although bookings are not compulsory-. The booking fee is 1 euro for each event.

Schools and groups: booking is mandatory and free of charge, up to a maximum of three bookings a day.

Purchases on line at www.festivalscienza.it or at the Festival Ticket Offices. For further information and updates please contact info@festivalscienza.it

Under the patronage of the President of the Italian Republic

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Camera di Commercio, Industria
e Artigianato di Genova

CNR – Consiglio Nazionale
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