

Newsletter TAKE PART IN

A SPRING OF FESTIVALS



Science and Philosophy Festival Foligno

From 11 to 14 April, the XIII Science and Philosophy Festival will be held in Foligno. This year the leitmotif of the events will be the Mediterranean, from cradle of science and philosophy to scenario of the challenges for change. The INFN will be present with four events.

11 APRIL, 6:30 p.m.

Teatro San Carlo - Foligno

Studying the Universe from the Heart of the Sardinian Earth

With **Alessandro Cardini**, Director INFN Cagliari, **Federica Govoni**, Director INAF - Cagliari Astronomical Observatory

Thanks to its geological characteristics and low anthropisation, Sardinia is an ideal place to set up large research infrastructures for studying the universe. The Sardinia Radio Telescope, a unique instrument in Europe, observes the universe through radio waves, while the international Einstein Telescope project aims to build a new underground observatory for gravitational waves in Barbagia. Furthermore, in the former mines of Sulcis, the ARIA project aims to purify Argon for the search for dark matter.

[Reservations](#)

13 APRIL, 4:45 p.m.

Auditorium Santa Caterina - Foligno

The cosmos seen underground and from under the sea, in the Mediterranean heartland

With **Antonio Zoccoli**, President of INFN

A large, world-class gravitational observatory underground in one of the world's 'quietest' territories in Sardinia is the international Einstein Telescope project, ET. A gravitational wave observatory at a depth of 200 metres, it will open a never-before-seen window on the Universe. In Sicily, a second technological eye is preparing to peer into some of the most portentous events in the Cosmos. It is Km3Net, the telescope for neutrinos, the most elusive particles in the Universe, which is being built at a depth of 3,500 metres off Capo Passero.

[Reservations](#)

13 APRIL, 6 pm

Dante Alighieri Municipal Library, Reading Room - Foligno

Bruno Maximovich Pontecorvo between science and history

*With **Giuseppe Mussardo**, SISSA, **Silvano Tagliagambe**, University of Sassari, **Lucia Votano**, INFN - Frascati National Laboratories*

Bruno Pontecorvo, the ingenious 'pupil' of Fermi's in Rome in the 1930s, marked the history of elementary particle physics and especially neutrinos with completely innovative contributions. He lived through decisive years for physics and world politics between fascism, racial laws, the Second World War, the first atomic bombs and the Cold War. His mysterious escape to the Soviet Union in 1950 aroused great controversy in the West and still fuels exciting questions today.

[Reservations](#)

14 APRIL, 11:30 a.m.

Palazzo Trinci, Sala Rossa - Foligno

A ray of (synchrotron) light in the darkness of the Middle East

*With **Fernando Ferroni**, GSSI professor, INFN researcher and designated ET project leader, **Gihan Kamel**, Helwan University, **SESAME manager**, **Giorgio Paolucci**, Elettra and scientific director until 2019 of SESAME*

SESAME synchrotron light source, located in Jordan not far from Amman, is one of the greatest testimonies of Science's ability to go beyond conflicts in the interest of society. A machine in whose construction 'unlikely' countries participated in a common activity. Jordan, Israel and Palestine, Turkey, Pakistan, Iran, Cyprus and Egypt. And it worked! There was important help from European countries with technology, personnel and financial contributions. Italy, thanks to INFN and Elettra, was the country that helped the most.

[Reservations](#)

Programme online: [Festival delle Scienze Roma | Programme](#)

Rome Science Festival

From 16 to 21 April, the 19th edition of the Festival of Sciences will be held at the Auditorium Parco della Musica in Rome. The theme will be "Errors and Wonders" and the INFN will be present, as always, with round tables, conferences, shows and activities for families and children.

17 APRIL, 11:00 a.m.

Auditorium Parco della Musica, Petrassi Hall - Rome

The universe in the blink of an eye

Organised by INFN

Four hundred thousand years elapse from the Big Bang, the birth of the universe, to the dawn of the cosmos, its first light. This is the period in which the building blocks of everything we know are formed and at the end of which the balance between light and matter breaks down to give rise, in the billions of years to follow, to stars, galaxies, galaxy clusters and solar systems. The story is punctuated by the voices of the scientists who study cosmic signals to decipher their messages and is accompanied by images, music and readings.

18 APRIL, 21:00

Auditorium Parco della Musica, Petrassi Hall - Rome

Maps of the Cosmos, stories that changed the universe

A performance by EGO (European Gravitational Observatory) with Diana Hobel and Marco Sgarbi, accompanied by drawings by Gabriele Peddes, texts by Diana Hobel, Vincenzo Napolano and Giada Rossi.

Our view of the Universe has changed radically in the last hundred years, as never before. Scientific revolutions and important discoveries have allowed us to draw new maps of the Universe. Discoveries made of intuitions, moments of euphoria and long phases of disorientation, which become stories within our reach thanks to the twists and turns, the enlightening and sometimes comical dialogues, and the profound humanity of their protagonists. And they thus allow us a glimpse into the vertigo of the infinite that scientists dare to look at.

20 APRIL, 6:30 p.m.

Auditorium Parco della Musica, Auditorium Arte - Rome

The craziest of exploits: the adventure of gravitational waves from Einstein to ET

Organised by GSSI, INAF, INFN, INGV

Eugenio Coccia Professor of Astrophysics at GSSI L'Aquila, Director of the Institute for High Energy Physics in Barcelona

Silvia Piranomonte Astrophysicist, first researcher at INAF

Massimo Carpinelli Director of EGO, Professor at the University of Milan Bicocca, INFN researcher

Giulio Selvaggi Research Director INGV

Moderator **Andrea Bettini** Journalist RaiNews24

21 APRIL, 6:30 p.m.

Auditorium Parco della Musica, Sala Ospiti - Rome

To err is human, to wonder is better

Organised by ASI, Human Technopole, INFN

Mario Cosmo Director of Science and Research ASI

Gaia Pigino Group Leader Structural Biology, Human Technopole

Lucio Rossi Professor, University of Milan, INFN researcher

Moderator: **Giorgia Burzachechi** Science journalist and populariser

20 and 21 APRIL

11:00 - 12:00 e 15:00- 16:00, 17:00 - 18:00

Auditorium Parco della Musica, Studio 2 - Rome

From marbles to atoms

Organised by INFN

Can a large white sheet of paper, markers, marbles, slides, cards and objects of different shapes and materials help us understand research methods? Observations, hypotheses and theories and more experiments are the basis of the scientific method. The boys and girls taking part in the activity will be accompanied into the microscopic world of atoms starting with a game with marbles with which they will have to discover the shape and material of a mysterious object. They will use the experiment to test their hypotheses about the object and look for relationships between collisions and shapes and materials. The game is thus a representation of the experiments in particle physics, from the investigation of atomic structure in the early 20th century to the grandiose experiments of today that seek to discover the secrets of matter and particles from the imprints they leave on the instruments that reveal them.

Programme soon online: [Festival delle Scienze Roma | Programme](#)