

Newsletter TAKE PART IN

EXPLORATIONS AT ROME SCIENCE FESTIVAL



With the theme “Exploring”, the 2022 edition of Rome Science Festival (<https://festivaldellescienzeroma.it/>) offers a wide programme of lectures, exhibitions, shows, and laboratories for schools. INFN, project partner together with ASI, contributes to the programme with two show-lectures, centred, respectively, on the world of quanta and the discovery of the Higgs boson, which celebrates ten years this year. There will be several round tables that will deal with the issue of exploration from different points of view,

weaving research in particle physics with other spheres of knowledge.

There will also be activities for schools, to lead children and kids in exploring our universe and its still unsolved mysteries.

To find out more: INFN at the 2022 Science Festival of Rome.

All the events will be held in Italian.

Show-lectures

24 NOVEMBER, at 9:00 p.m., Sala Petrassi, Auditorium Parco della Musica

QUANTUM This word has changed physics

With Paolo Fresu, trumpet player and writer, and Marco Pallavicini, vice president of INFN and professor at the University of Genoa.

Find out more and book. (<https://festivaldellescienzeroma.it/eventi/quanto/>)

26 NOVEMBER, at 9:00 p.m., Sala Sinopoli, Auditorium Parco della Musica

ANATOMY OF A DISCOVERY. Dialogue in music from the Higgs boson to the dark universe

With Stefania De Curtis, director of the Galileo Galilei Institute; Lucio Rossi, Coordinator of INFN Accelerator Committee; and Antonio Zoccoli, INFN president. Sara Zambotti, Rai radio host, will moderate. With musical performances by La Banda dell'Uku, readings by Francesco Patanè, illustrated by Luca Ralli.

Find out more and book. (<https://festivaldellescienzeroma.it/eventi/anatomia-di-una-scoperta/>)

Lectures

Find out more and book for the INFN lectures at the 2022 Rome Science Festival

(<https://collisioni.infn.it/evento/conferenze-tavole-rotonde-festival-scienze-roma-2022/>).

21 NOVEMBER, at 6:00 – 7:00 p.m., Sala Petrassi, Auditorium Parco della Musica

SCIENCE IN ROME. Why a Science Museum in Rome

With Michele Lanzinger, MUSE, Francesca Scianitti, INFN, Catherine Franche, ECSITE, Giorgio Manzi, Sapienza Università di Roma

26 NOVEMBER, at 3:00 p.m., Sala Ospiti, Auditorium Parco della Musica

INVESTIGATING ABYSSES. Scientific research in exploring seabeds

Produced by CNR, INGV, INFN, ISPRA

With Francesca Alvisi, CNR – Institute of Marine Sciences researcher, Bologna; Nadia Lo Bue INGV researcher; Sante Francesco Rende, ISPRA researcher; and Piera Sapienza, researcher at the INFN Southern National Laboratories. Fabio Gallo, Linea Blu, will moderate

26 NOVEMBER, at 5:30 p.m., Teatro Studio Borgna, Auditorium Parco della Musica

WHAT'S LEFT TO EXPLORE. New boundaries for known space

Produced by ASI, ESA, INAF, INFN

With Mario Cosmo, ASI Science and Research director; Viviana Fafone, professor at the Tor Vergata University of Rome and INFN researcher; Paolo Ferri, former ESA Head of Space Operations; and Adriano Fontana, research director at INAF-Astronomical Observatory of Rome. Elisa Nichelli, astrophysicist, journalist and science communicator, will moderate

27 NOVEMBER, at 3:00 p.m., Sala Petrassi, Auditorium Parco della Musica

WHERE IS AI LEADING US?

Produced by GSSI, HT, IIT, INFN

With Daniele Bonacorsi, professor at the University of Bologna and INFN researcher; Paola Inverardi, Gran Sasso Science Institute rector; Francesco Iorio, bioinformatician, Human Technopole computational biology research centre; and Agnieszka Wykowska, Head of “Social Cognition in Human-Robot Interaction” Lab IIT

27 NOVEMBER, at 5:30 p.m., Teatro Studio Borgna, Auditorium Parco della Musica

IS IT TIME FOR FUSION? Nuclear fusion, a complex global challenge

Produced by CNR, ENEA, INFN

With Paola Batistoni, head of ENEA's Fusion Energy Development Division; Daniela Farina, director of CNR – Institute for Plasma Science and Technology; and Marco Ripani, head of the DTT-INFN (Divertor Tokamak Test facility) project, researcher with the INFN Genoa Division. Silvia Kuna Ballero, astrophysicist, will moderate

Activities for school and families

Find out more and book for the INFN activities for schools and families at the 2022 Rome Science Festival (<https://collisioni.infn.it/evento/infn-al-festival-delle-scienze-di-roma-2022-esplorare/>).

I'LL TELL YOU ABOUT THE UNIVERSE. Physics for children and kids

A series of meetings for children and kids from 8 to 12 years, enriched with animations and cartoons, to stimulate curiosity about the mysteries of the universe.

Booking is mandatory: educational@musicaperroma.it (mailto:educational@musicaperroma.it)

22 NOVEMBER, at 10:15 a.m., Studio 2, Auditorium Parco della Musica

DARK MATTER

With Matteo Duranti, INFN Perugia Division researcher

23 NOVEMBER, at 10:15 a.m., Studio 2, Auditorium Parco della Musica

GRAVITATIONAL WAVES

With Pia Astone, INFN Rome Division research director

24 NOVEMBER, at 10:15 a.m., Studio 2, Auditorium Parco della Musica

NEUTRINOS

With Giuliana Galati, researcher with the Aldo Moro University of Bari and the INFN Bari Division

25 - 27 NOVEMBER, Ludoteca, Auditorium Parco della Musica

HEPScope - The High Energy Physics escape room

Organised by INFN Rome Division and Sapienza University of Rome

INFN at the Festival of Science in Cagliari

New technologies and quantum computing, black holes, and science books: INFN is also participating this year in the FestivalScienza, in Cagliari from 10 to 13 November, with the theme “Science & Technology”.

Find out more

(<https://collisioni.infn.it/evento/infn-festivalscienza-cagliari-2022/>) *All the events will be held in Italian*

10 NOVEMBER, at 4:00 – 7:00 p.m., Rectorate Lecture Hall, Conference room, University of Cagliari

INAUGURAL FESTIVAL LECTURE

With Ezio Previtali, Director of INFN Gran Sasso National Laboratories; and Anna Grassellino, director of the Superconducting Quantum Materials and Systems Center, Fermilab, Chicago (via video). Alberto Masoni, University of Cagliari, INFN research director, and Paolo Magliocco, science journalist are coordinating the event.

10 NOVEMBER, at 9:00 – 11:30 a.m., Fondazione di Sardegna, Conference room

FOR A HANDFUL OF BOOKS... ABOUT SCIENCE

Activities for high school students

With Viviana Fanti and Corrado Cicalò, University of Cagliari, INFN

10 NOVEMBER, at 10:00 – 11:30 a.m., EXMA, Conference room

CHASING BLACK HOLES WITH THE EVENT HORIZON TELESCOPE. IS EINSTEIN STILL RIGHT?

With Ciriaco Goddi, astrophysicist at the University of Cagliari, INAF, and INFN; and Maria Felicia de Laurentis, astrophysicist at the University of Naples, INAF, and INFN. Matteo Tuveri, INFN Cagliari Division and University of Cagliari, will moderate.

INFN at Futuro Remoto

“Equilibriums” is the theme of the XXXVI edition of Futuro Remoto (“Distant Future”), which will be held from 22 to 27 November in Naples and in which INFN will participate with various initiatives. This year, the programme involves exhibitions and live events hosted by the Città della Scienza museum, but also an offering of online events.

Find out more (<https://collisioni.infn.it/evento/infn-futuro-remoto-2022-equilibri/>)

All the events will be held in Italian.

FROM 22 TO 27 NOVEMBER, Spazio Galilei, Città della Scienza

SPACE (TO THE FUTURE)

Exhibition curated by the Fondazione Idis - Città della Scienza, in collaboration with universities and research bodies, dedicated to exploring the universe that humanity has conducted over time with different investigation methods, to the current knowledge and questions still unanswered.

23 NOVEMBER, at 10:45 a.m. – 12:15 p.m., ONLINE

GAMMA RAYS AND THE CHERENKOV TELESCOPE ARRAY OBSERVATORY: A GLANCE AT THE EXPLOSIVE UNIVERSE!

For high school students, produced by the INFN Naples Division

With Carla Aramo, INFN Naples Division; Alba Fernández Barral, Cherenkov Telescope Array Observatory (CTAO); and Anna Wolter, INAF - Brera Astronomical Observatory

24 NOVEMBER, at 10:30 – 11:30 a.m., Sala Averroè, University of Naples Federico II

INVESTIGATING BLACK HOLES WITH THE EVENT HORIZON TELESCOPE

Produced by the Department of Physics, University of Cagliari, INAF, INFN

With Ciriaco Goddi, researcher at the University of Cagliari, INAF and INFN; and Mariafelicia de Laurentis, researcher at the University of Naples Federico II, INAF and INFN

FROM 25 NOVEMBER, at 9:00 a.m.-2:00 p.m., 26-27 NOVEMBER, at 10:00 a.m. – 5:00 p.m.

DARKSIDE AND THE EQUILIBRIUM BETWEEN ORDINARY MATTER AND DARK MATTER

Laboratories and demonstrations by the “E. Pancini” Department of Physics of the University of Naples Federico II and the INFN Naples Division

With Francesco Di Capua, Giuliana Fiorillo, and Giuseppe Matteucci, researchers with the “E. Pancini” Department of Physics at the University of Naples Federico II and INFN

25 NOVEMBER, at 7:00 - 8:30 p.m., Sala Newton, Città della Scienza

QUANTUM. This word has changed physics

With Marco Pallavicini, vice president of INFN and professor of the University of Genoa, and Lorenzo Hengeller, pianist and composer

Higgs10

Events organised by the INFN Divisions and ATLAS and CMS collaborations to celebrate 10 years since the discovery of the Higgs boson continue.

The event will be held in Italian.

9 NOVEMBER, at 6:45 p.m., Aula Magna Polo Carmignani, Pisa

EXPLORING THE UNIVERSE. 10 years of Higgs boson

Organized for the 2022 Higgs conference in Pisa

Round table with Stefania de Curtis, director of the Galileo Galilei Institute; Riccardo Barbieri, Emeritus Professor of the Scuola Normale Superiore of Pisa; Marumi Kado, director at the Max Planck Institute; Michelangelo Mangano, CERN Department of Theoretical physics; and Guido Tonelli, Emeritus Professor at the University of Pisa. Silvia Bencivelli, science journalist, will moderate.

Find out more (<https://higgs10.infn.it/evento/esplorando-luniverso/>)