

Newsletter TAKE PART IN

FROM GALILEO TO QUANTUM PHYSICS AT THE PHILOSOPHY FESTIVAL



Once again this year, INFN is taking part in *festivalfilosofia* (<https://www.festivalfilosofia.it/>), scheduled for 16-18 September 2022, in Modena, Carpi and Sassuolo. The *festivalfilosofia* (<https://www.festivalfilosofia.it/>), now at its 22nd edition, aims to be a space for philosophical and cultural dialogue and debate, with a dense programme of lectures, exhibitions, performances, readings, children's activities

and philosophical dinners. The meeting organised by INFN will be hosted at the Piazza Martiri in Carpi and will focus on the radical change that quantum mechanics triggered in early 20th-century physics, revolutionising its foundations and even the notion of measuring reality.

18 SEPTEMBER, 9.00 P.M., Piazza Martiri, Carpi (MO)

MEASURING THE COSMOS

With **Marco Pallavicini**, member of the INFN executive board and professor at the University of Genoa, and **Marco Cattaneo**, journalist, editor of *Le Scienze* and *National Geographic Italy*. Find out more. (<https://collisioni.infn.it/evento/linfn-al-festivalfilosofia-2022-la-misura-del-cosmo/>)

INFN AT GravitasFest

17-18 SEPTEMBER, 'Il ghetto' municipal centre of art and culture, Cagliari

INFN Cagliari Division organizes the first edition of **GravitasFest in Cagliari**, a multidisciplinary festival spanning contemporary **physics, philosophy and history of science, art and sociology**. Find out more. (<https://collisioni.infn.it/evento/linfn-al-gravitasfest-2022-oltre-il-senso-comune/>)

17 SEPTEMBER, 4.35 P.M.

LISTENING AND SEEING THE DARKNESS OF THE COSMOS: BLACK HOLES

With **Michele Punturo**, INFN Perugia, head of the Einstein Telescope experiment and **Mariafelicia de Laurentis**, University of Naples, researcher at INFN and at the Event Horizon Telescope collaboration.

17 SEPTEMBER, 9.30 P.M.

DANTE AND MODERN SCIENCE

With commentary by **Antonio Zoccoli**, President of the National Institute for Nuclear Physics and with the narration of **Stefano Sabelli**, actor.

18 SEPTEMBER, 3.00 P.M.

PHILOSOPHYSICS OF THE DARK UNIVERSE

With **Riccardo Murgia**, Gran Sasso Science Institute, **Claudia Sciarma**, astrophysicist and science communicator and **Walter Bonivento**, INFN Cagliari.

18 SEPTEMBER, 3.45 P.M.

THE DREAM OF UNIFYING THE INFINITELY LARGE AND THE INFINITELY SMALL

With **Mariano Cadoni**, University of Cagliari and INFN and **Giovanni Amelino-Camelia**, University of Naples.

INFN AT GALASSICA - ASTRONOMY FESTIVAL

Once again this year, INFN will be taking part in Galassica Festival of Astronomy, with three talks dedicated to different ways of exploring the universe. Find out more (<https://collisioni.infn.it/evento/linfn-a-galassica-festival-astronomia-2022/>).

18 SEPTEMBER, 10.00 A.M - 01.00 P.M., Castello di Malcavalca, Esanatoglia (MC)

THE GIANTS THAT STUDY THE UNIVERSE

with **Carla Aramo**, researcher INFN Naples Division, CTA collaboration

SURFING THE WAVE... SPATIAL! HISTORY OF GRAVITATIONAL WAVES

with **Marco Drago**, researcher INFN and Sapienza University of Rome, Virgo collaboration

FROM INFINITESIMAL TO INFINITE: A SHORT JOURNEY IN PARTICLE PHYSICS

with **Vincenzo Vagnoni**, researcher INFN Bologna Division, scientific head of the LHCb - CERN Geneva collaboration

HUNTING FOR DARK MATTER WITH THE XENONnT EXPERIMENT

with **Andrea Mancuso**, researcher INFN Bologna Division and University of Bologna, XENONnT experiment

INFN AT TRIESTENEXT

FROM 22 TO 24 SEPTEMBER, Trieste

The applications of particle physics for health, the discovery of the Higgs boson, the CTAO telescope: these are the topics of the talks INFN researchers will give at TriesteNext 2022. Find out more.

(<https://collisioni.infn.it/evento/inf-n-a-triestenext-2022/>)

22 - 24 SEPTEMBER, Piazza Unità d'Italia

ACTIVITIES ORGANIZED BY INFN AND INAF

Interactive science workshops for children and teens, spanning from virtual reality to coding and treasure hunts.

23 SEPTEMBER, 3.00 - 4.15 P.M., Urban Center, Corso Camillo Benso Conte di Cavour, 2/2

THE CHERENKOV TELESCOPE ARRAY OBSERVATORY: EYES ON THE MOST EXTREME UNIVERSE

With **Carla Aramo**, INFN researcher, **Francesco Longo**, professor at the University of Trieste and INFN researcher, **Roberta Zanin**, project scientist at the Cherenkov Telescope Array Observatory (CTAO). Moderator: **Giacomo Principe**, researcher at the University of Trieste. *The event will be held in English.*

24 SEPTEMBER, 10.00 - 11.15 A.M., Autonomous Region of Friuli-Venezia Giulia, Piazza Unità d'Italia

PARTICLES FOR HEALTH

with **Alberto Andrichetto**, researcher INFN Laboratori Nazionali di Legnaro, **Silva Bortolussi**, researcher INFN, professor University of Pavia, **Pablo Cirrone**, researcher INFN Laboratori Nazionali del Sud, **Gaia Pupillo**, researcher INFN Laboratori Nazionali di Legnaro. Moderator: **Enrico Fragiaco**, researcher INFN Trieste. *The event will be held in English.*

24 SEPTEMBER, 6.00 - 7.15 p.m., Talk Area, Piazza Giuseppe Verdi, Trieste

THE HIGGS BOSON AND THE FRONTIERS OF THE UNIVERSE

with **Guido Tonelli**, researcher CERN and INFN, professor emeritus University of Pisa, **Giancarlo Panizzo**, researcher in Physics University of Udine, and **Giulia Sorrentino**, PhD student University of Trieste. Moderator: **Marina Cobal**, researcher INFN and CERN, professor emeritus University of Udine

#70INFN

The celebrations for the **70th anniversary of the foundation of INFN** come to a close: the last event will be held in Turin within the scope of the presentation of the Three-Year Business Plan.

26-29 SEPTEMBER, Teatro Colosseo, Turin

STUDY DAYS ON THE INFN THREE-YEAR PLAN

Organized by the Office of the President of INFN and INFN Turin Division. Find out more.

(<https://70.infn.it/evento/giornate-di-studio-sul-piano-triennale-infn/>)

INFN AT THE EUROPEAN RESEARCHERS' NIGHT 2022

30 SEPTEMBER 2022

As usual, INFN Laboratories, Divisions and Related Groups will be taking part in the European Researchers' Night, with meetings and workshops in many cities across Italy. Find out more.

(<https://www.nottedeiricercatori.it/>)

HIGGS10

The events organised by INFN Sections and the ATLAS and CMS collaborations to celebrate the 10th anniversary of the discovery of the Higgs boson continue.

26 SEPTEMBER, 9.00 P.M., Cinema La Compagnia, Via Camillo Cavour, Florence

THE NEW WORLD BEHIND THE DISCOVERY: FUTURE SCENARIOS FOR UNDERSTANDING THE UNIVERSE

Organised by the University of Florence, the INFN Florence Division, and the CMS Italy Collaboration. Find out more. (<https://higgs10.infn.it/evento/il-nuovo-mondo-dietro-la-scoperta/>)

29 SEPTEMBER, 3.00 P.M. , Aula Amaldi, Department of Physics Sapienza University of Rome

HIGGS&FIGS: WHAT WE STILL NEED TO UNDERSTAND TEN YEARS AFTER THE DISCOVERY OF THE HIGGS BOSON

Organised by the INFN Rome Division and the Physics Department of Sapienza University of Rome. Find out more. (<https://higgs10.infn.it/evento/higgsfichi/>)

30 SEPTEMBER, 9.30 A.M - 2.50 P.M., Aula Grassano, Department of Physics University of Rome Tor Vergata

THE MISSING LINK. 10 YEARS SINCE THE DISCOVERY OF THE HIGGS BOSON

Organised by the ATLAS group of the University of Rome Tor Vergata and INFN Rome Tor Vergata Division. Find out more. (<https://higgs10.infn.it/evento/lanello-mancante/>)