INFN
Istituto Nazionale di Fisica Nucleare
Laboratori Nazionali di Frascati

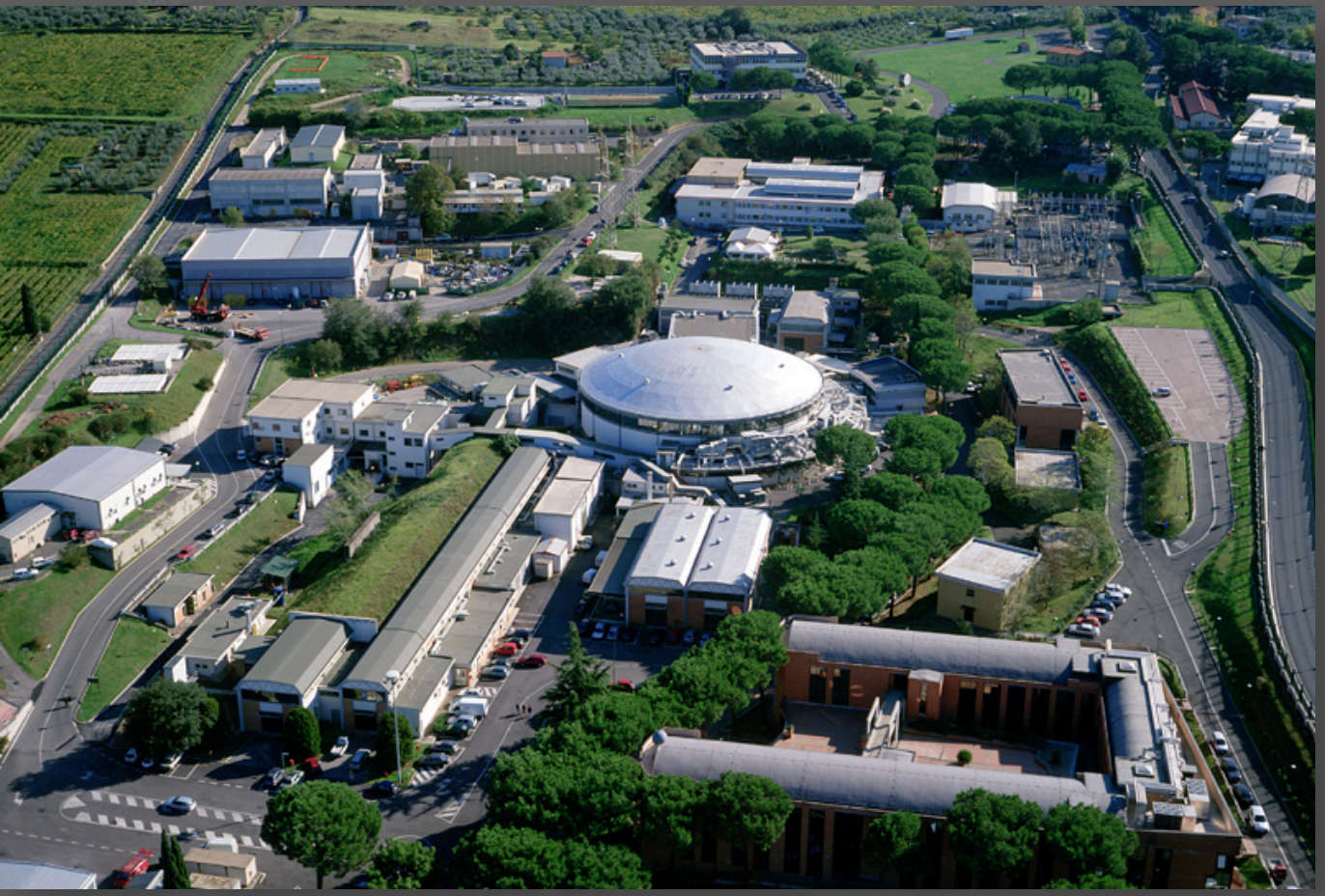
Bruno Touschek visitor centre
Laboratori Nazionali di Frascati - INFN

The INFN-LNF Bruno Touschek Visitor Centre: a hub for public engagement activities

S. Bertelli, D. Domenici, E. Danè

ICHEP 2022, Bologna July, 9

INFN Frascati National Laboratory



Built in 1955, the **National Laboratory of Frascati** (**LNF**) was the first Italian research facility for the study of nuclear and subnuclear physics with accelerators

It is the largest laboratory of the Italian National Institute for Nuclear Physics (INFN), the agency whose mission is theoretical, experimental and technological research in subnuclear, nuclear and astroparticle physics

EPS Historic site for the first proton-positron Collider AdA in operation in 1961

Situated in a very important scientific area: ENEA, ESA-ESRIN,CNR, INAF, Universities

INFN Frascati National Laboratory

RESEARCH FIELDS

High Energy, Astroparticle, Nuclear, Theoretical, Technology and Applied Physics, Computing

INFN Frascati National Laboratory

PUBLIC ENGAGEMENT WITH SCIENCE

Students Programme	Teachers programme	General public Long Life Learning	Policy makers Politicians	Tech transfer Industries companies Universities

10000 visitors every year – before Covid

THE IDEA OF A VISITOR CENTRE

Bridge science and society, sharing knowledge, place for formal and informal physics education activities

Chronicle the history of the Laboratory with a focus on particle accelerators and detectors

Preserve the historical-scientific heritage of LNF

Showcase instruments of experiments either held in LNF or outside

Combine parts of real experiments, video mapping, multimedia, hands-on/body-on experiments, installations

THE IDEA OF A VISITOR CENTRE

Bruno
Touschek
visitor centre
Laboratori Nazionali di Frascati - INFN

TOP VIEW

EDULAB

Bruno Touschek visitor centre
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LISTENING TO THE COSMOS

SEEING THE INVISIBLE

THE GIFT OF MASS

FROM RESEARCH TO SOCIETY

ACCELERATING PARTICLES

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HANDS-ON /
DEMOS ACTIVITIES

EDULAB

EXHIBITION AREA

LISTENING TO THE COSMOS

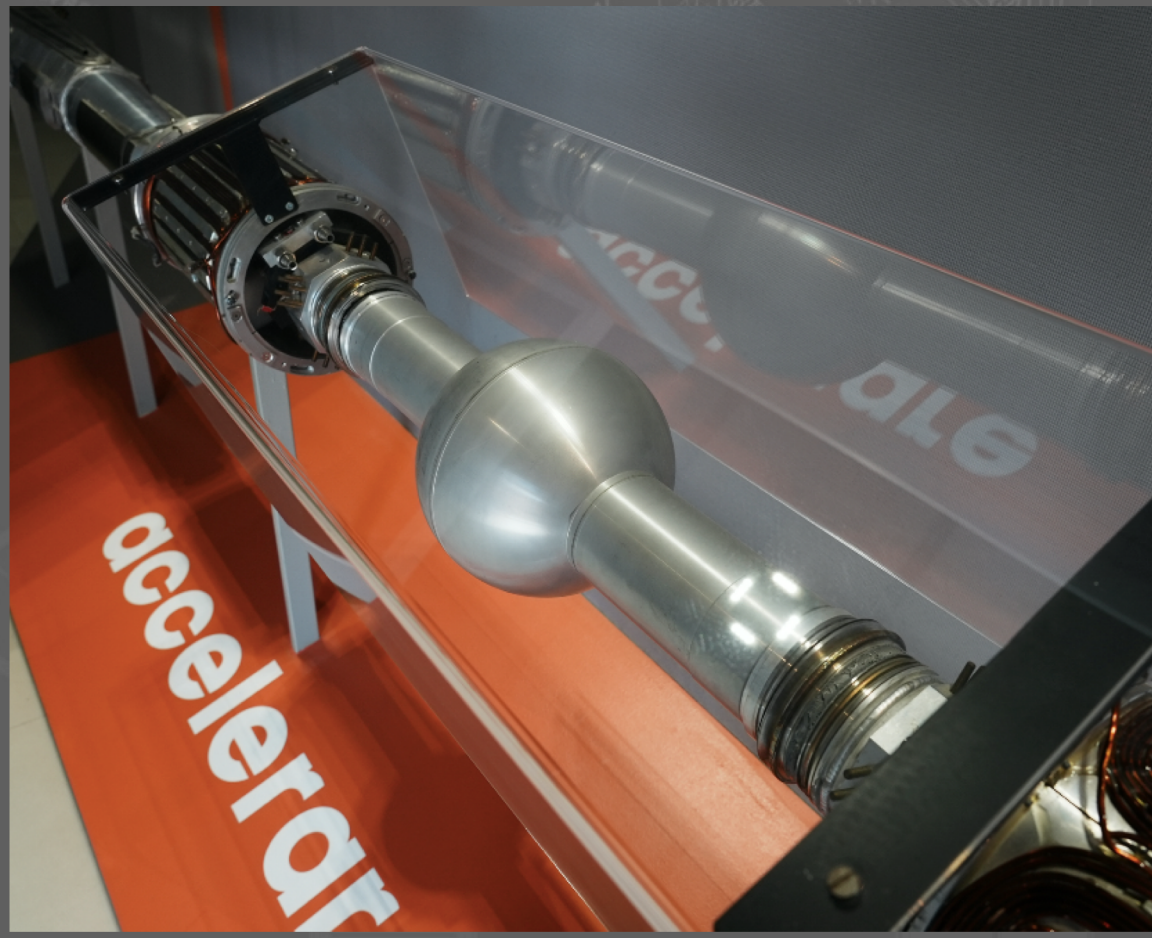
SEEING THE INVISIBLE

THE GIFT OF MASS

FROM RESEARCH TO SOCIETY

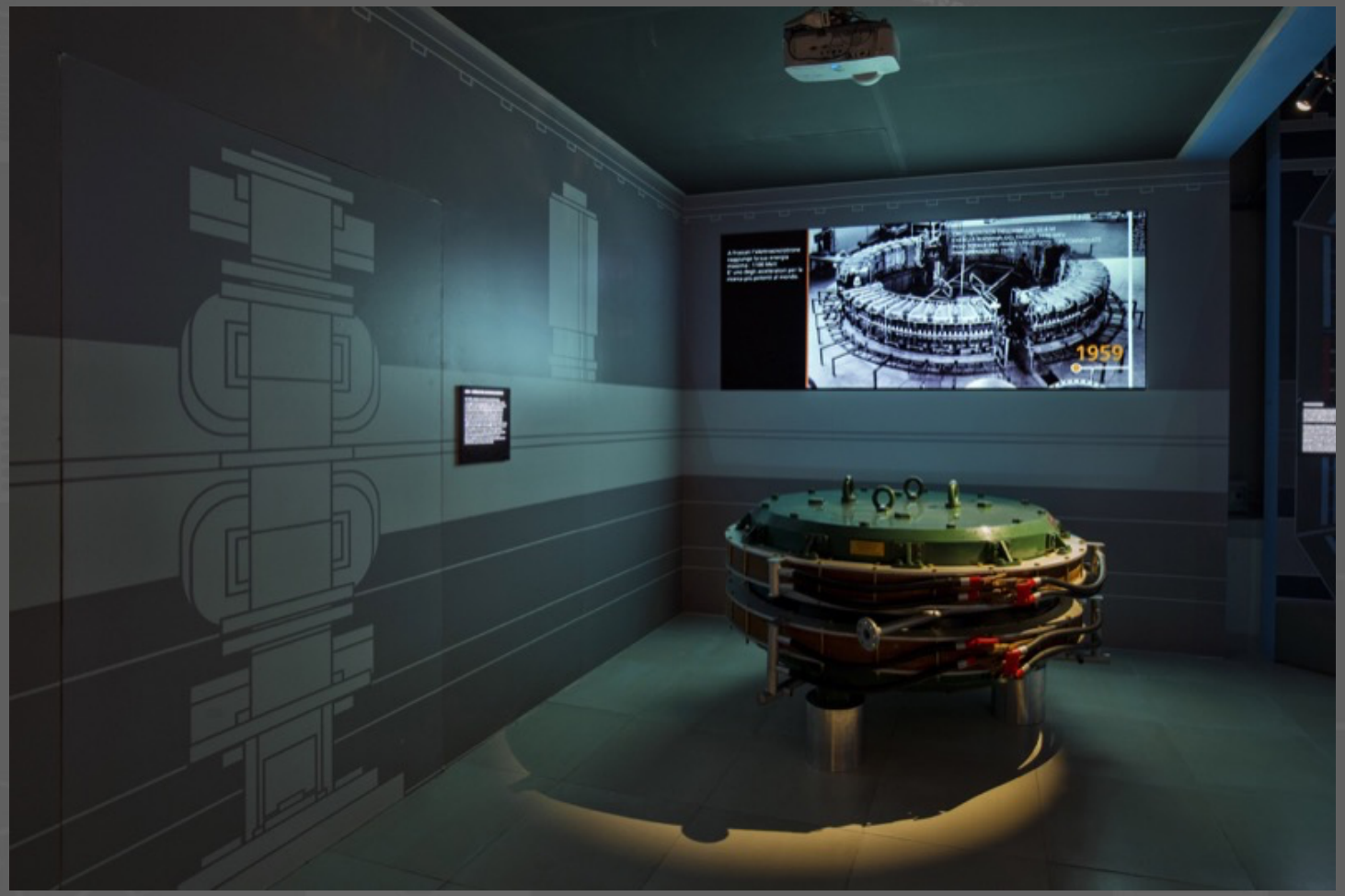
ACCELERATING PARTICLES

Accelerating particles



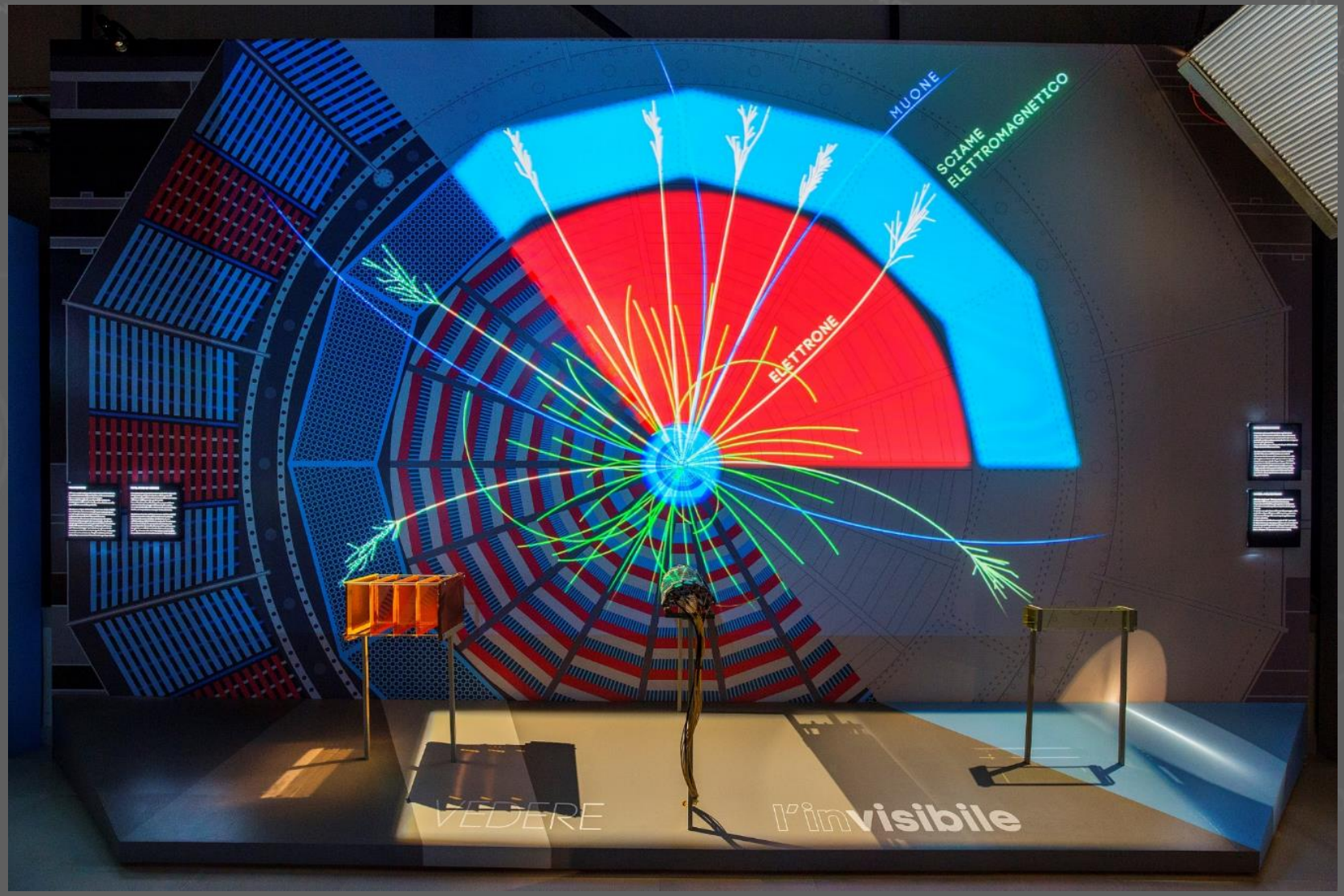
DAFNE/Kloe interaction point

Accelerating particles

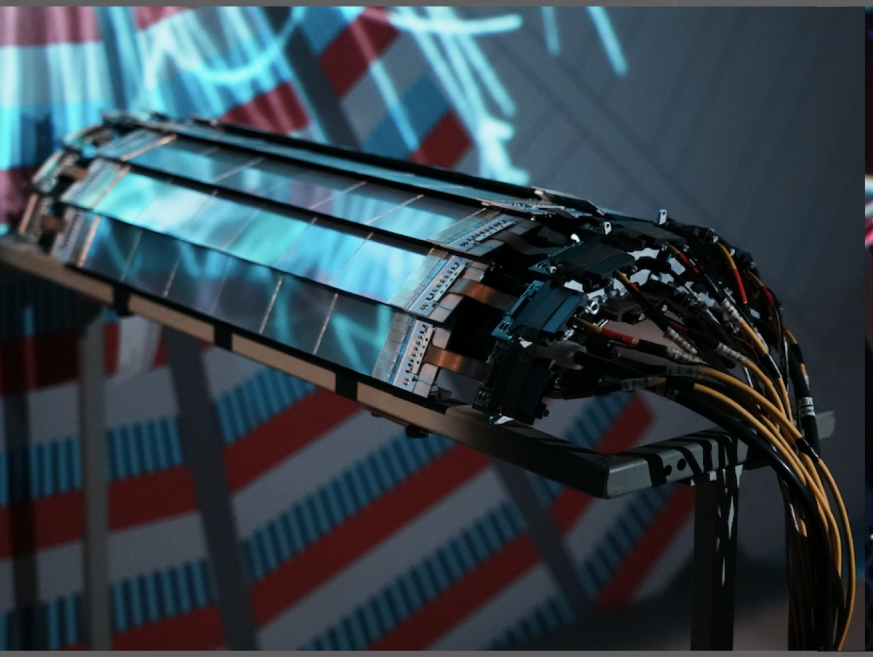


AdA mockup

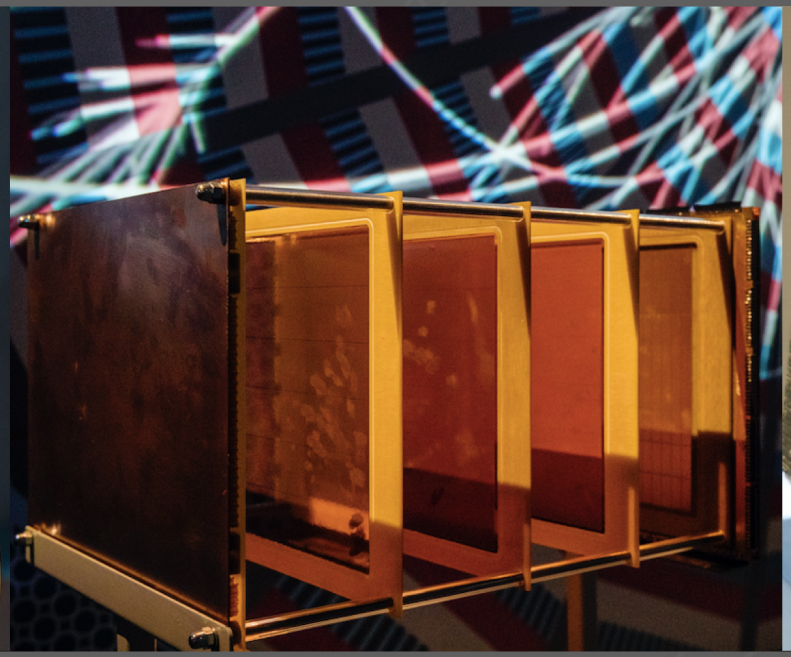
Seeing the invisible – video mapping



Seeing the invisible



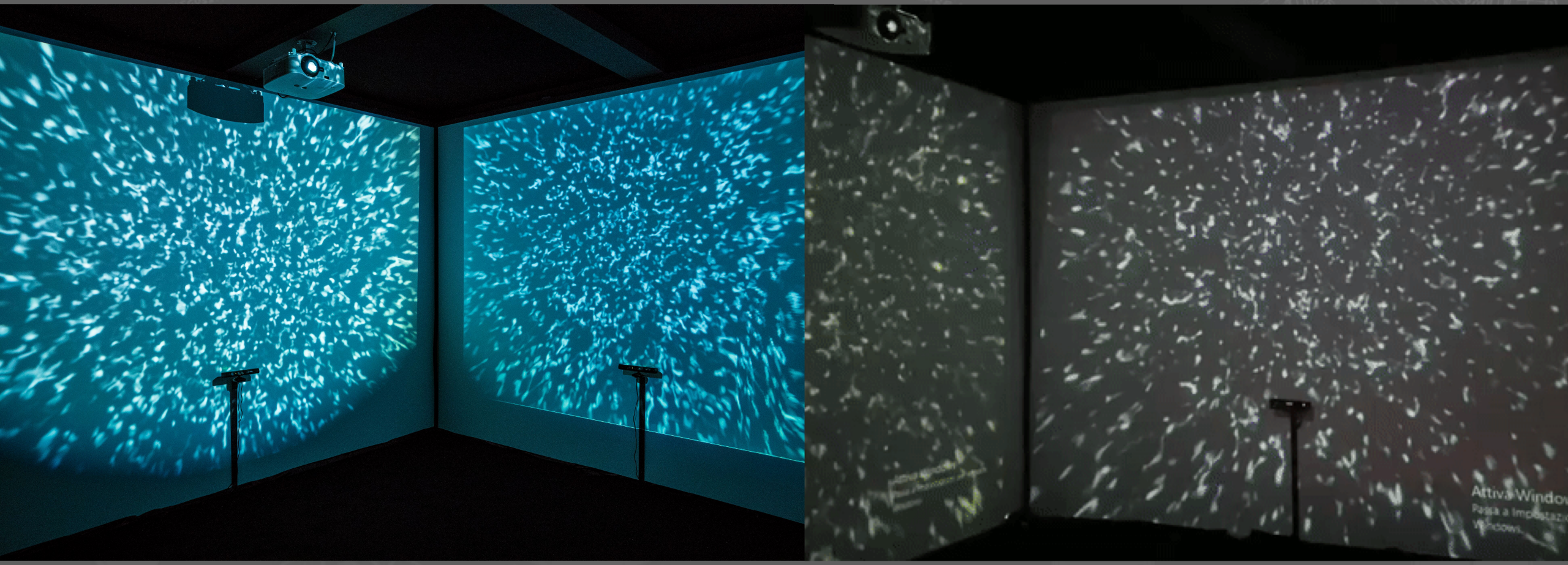
The Aleph vertex locator



LHCb triple GEM detector

Module of KLOE calorimeter

The gift of mass – art installation

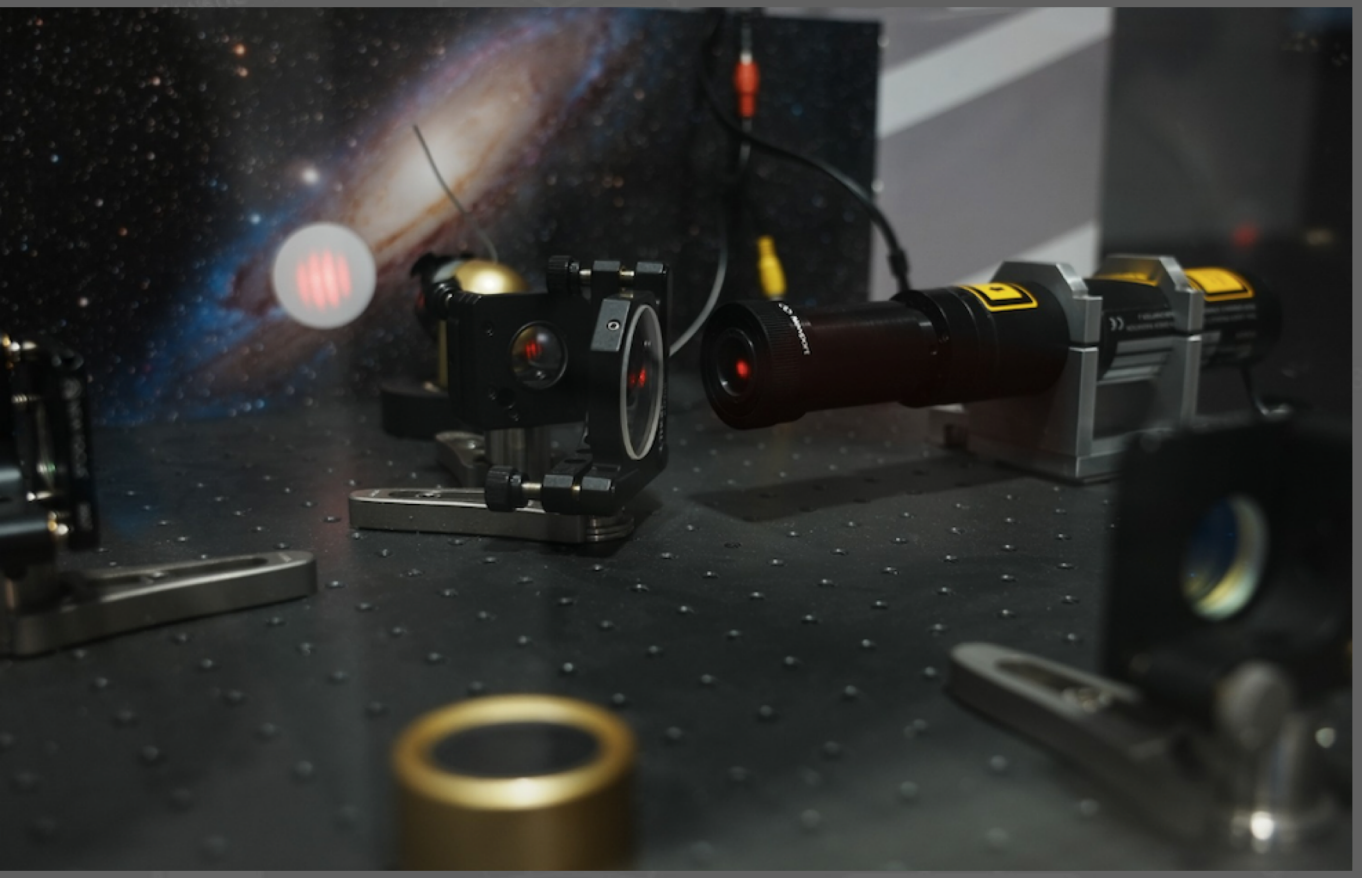


Listening to the Cosmos

TIGA gravitational wave antenna

NAUTILUS gravitational wave antenna

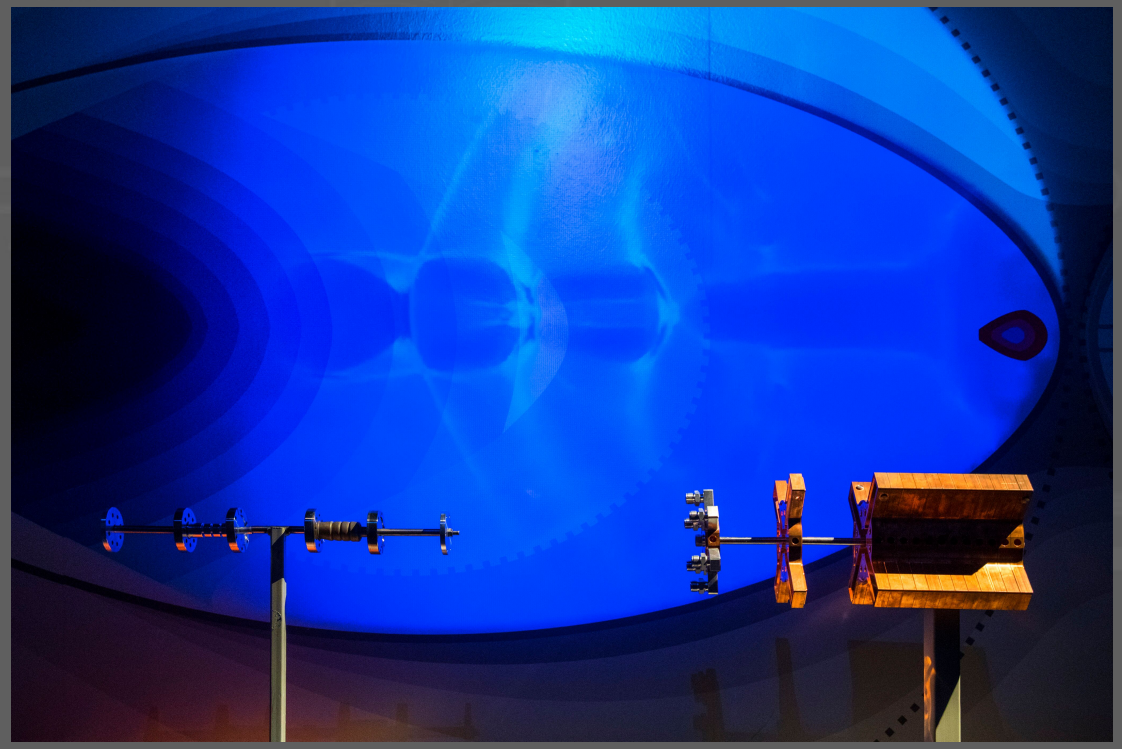
Listening to the Cosmos



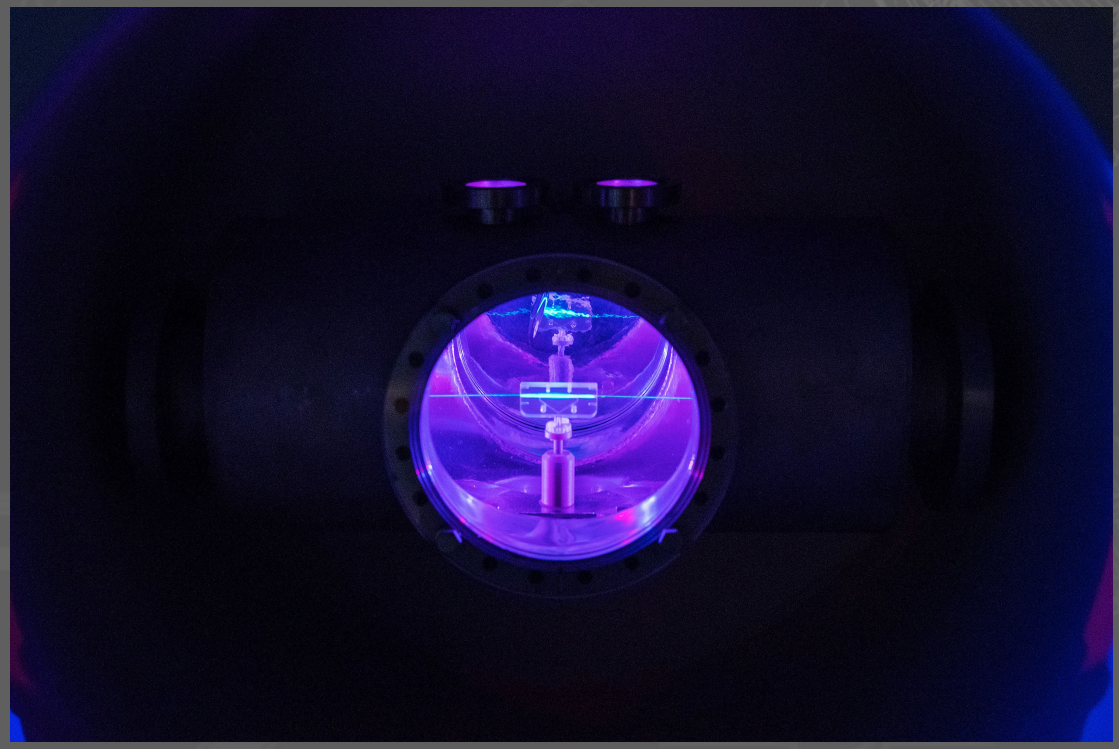
Interferometer

A Cloud Chamber

From Research to Society – future developments

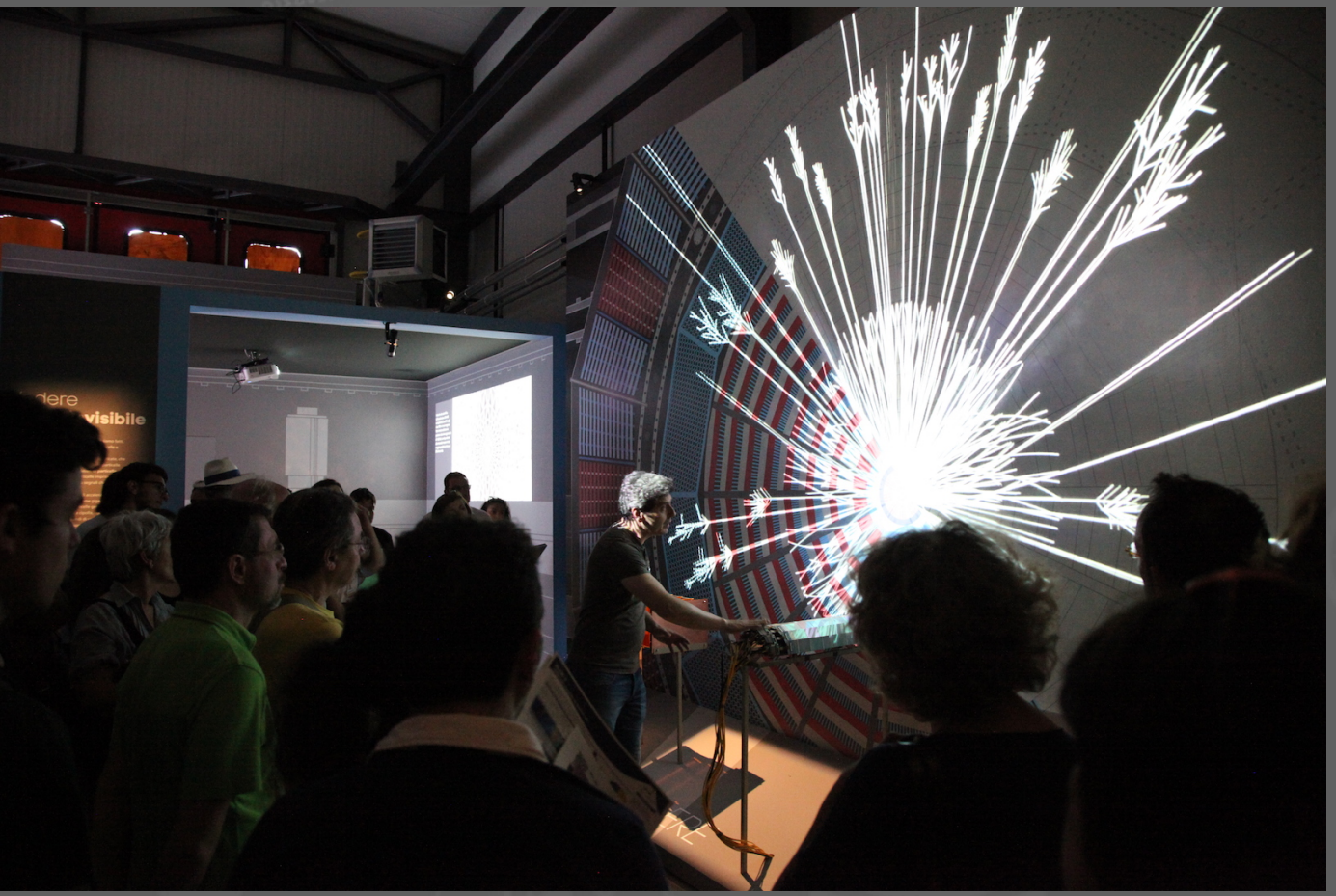


Radiofrequency cavity



Gas-Filled Capillary Plasma for
Laser Wakefield Acceleration

Events at the Bruno Touschek Visitor Centre



Thursday afternoon openings

Visits for kids, students, teachers and general public, politicians, policy makers

Opendays, European Researchers' Night, Science Festivals

C'è spazio, tv show, in collaboration with ESA

Nov 2018 – Feb 2020: 7000 visitors

Virtual guided tours and video-lectures – during the pandemic

Available on INFN LNF YouTube channel

Recipients:
Students, teachers and general public

Public and restricted mode to allow interaction
Live chat

Italian and English

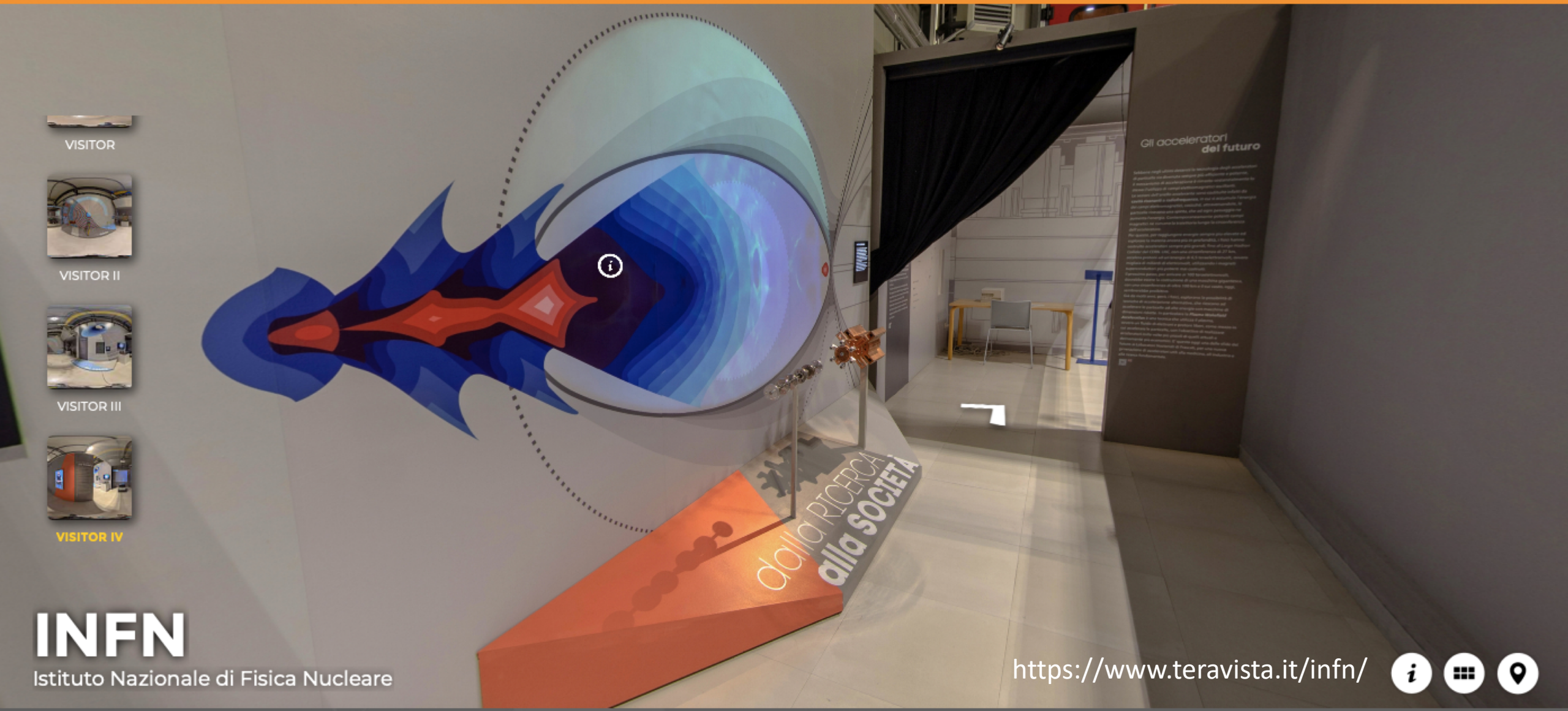
Virtual guided tours and video-lectures – during the pandemic

Available on INFN LNF YouTube channel

https://bit.ly/physics-electron

https://bit.ly/lecture-detectors

NET è un progetto della Notte Europea dei Ricercatori finanziato dalla Commissione Europea nell'ambito delle azioni Marie Sklodowska-Curie. GA. 101036127



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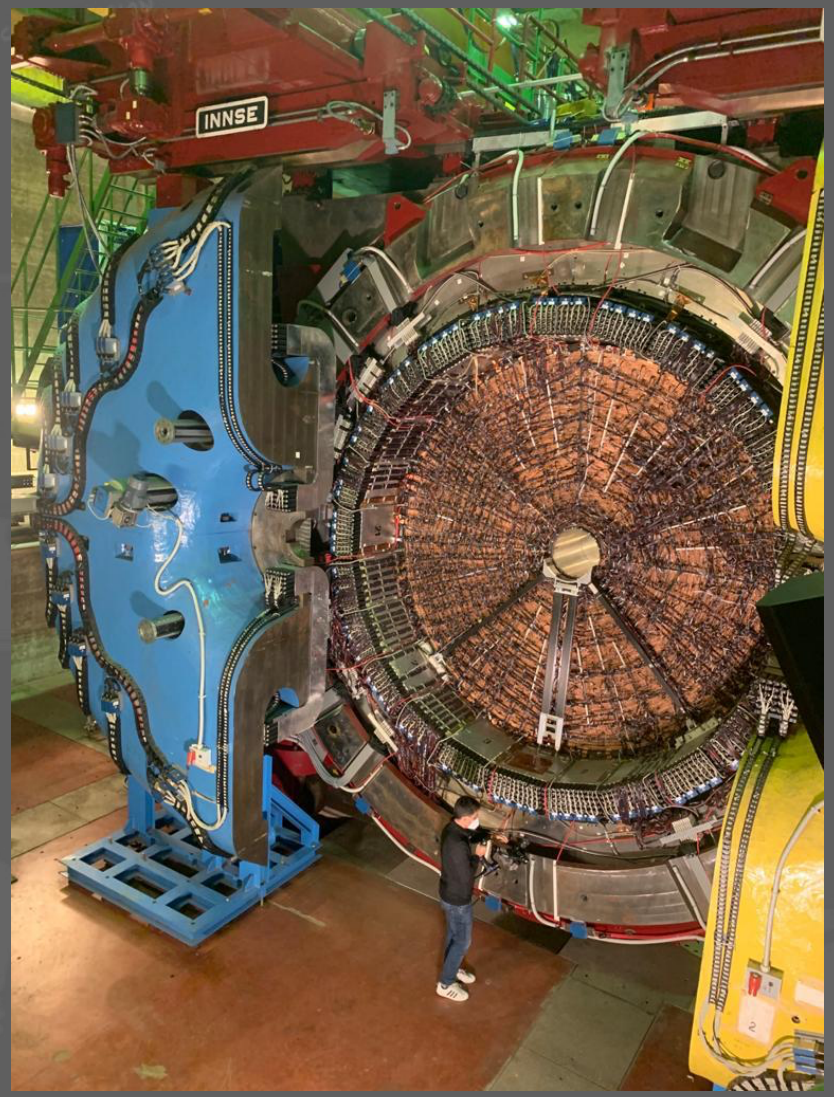
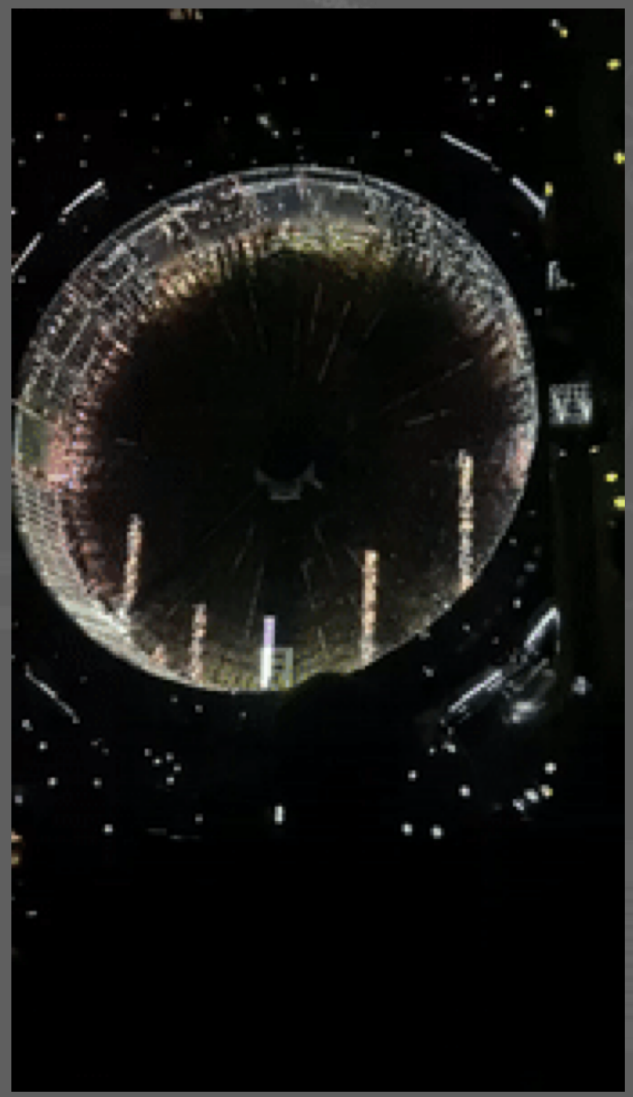
https://www.teravista.it/infn/

2022: KLOE video mapping – The perfect asymmetry





Conclusions and perspectives

The Bruno Touschek Visitor Centre is a permanent exhibition dedicated to the history of particle physics, that plays a central role in the popularization of INFN LNF science initiatives (in person and virtual)

The Centre is conceived as a public engagement hub to promote the scientific culture and to preserve the LNF historical-scientific heritage

In the near future:
Increasing number of events (also in blended modality) to engage people, realization of virtual and augmented reality exhibits

In the long-term:
Realization of a Science Centre (design and socio-impact study in progress) to enlarge the public outreach activities, creating a stronger connection to the territory

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susanna.bertelli@lnf.infn.it

visitorcentre.lnf.infn.it

teravista.it/infn/

w3.lnf.infn.it