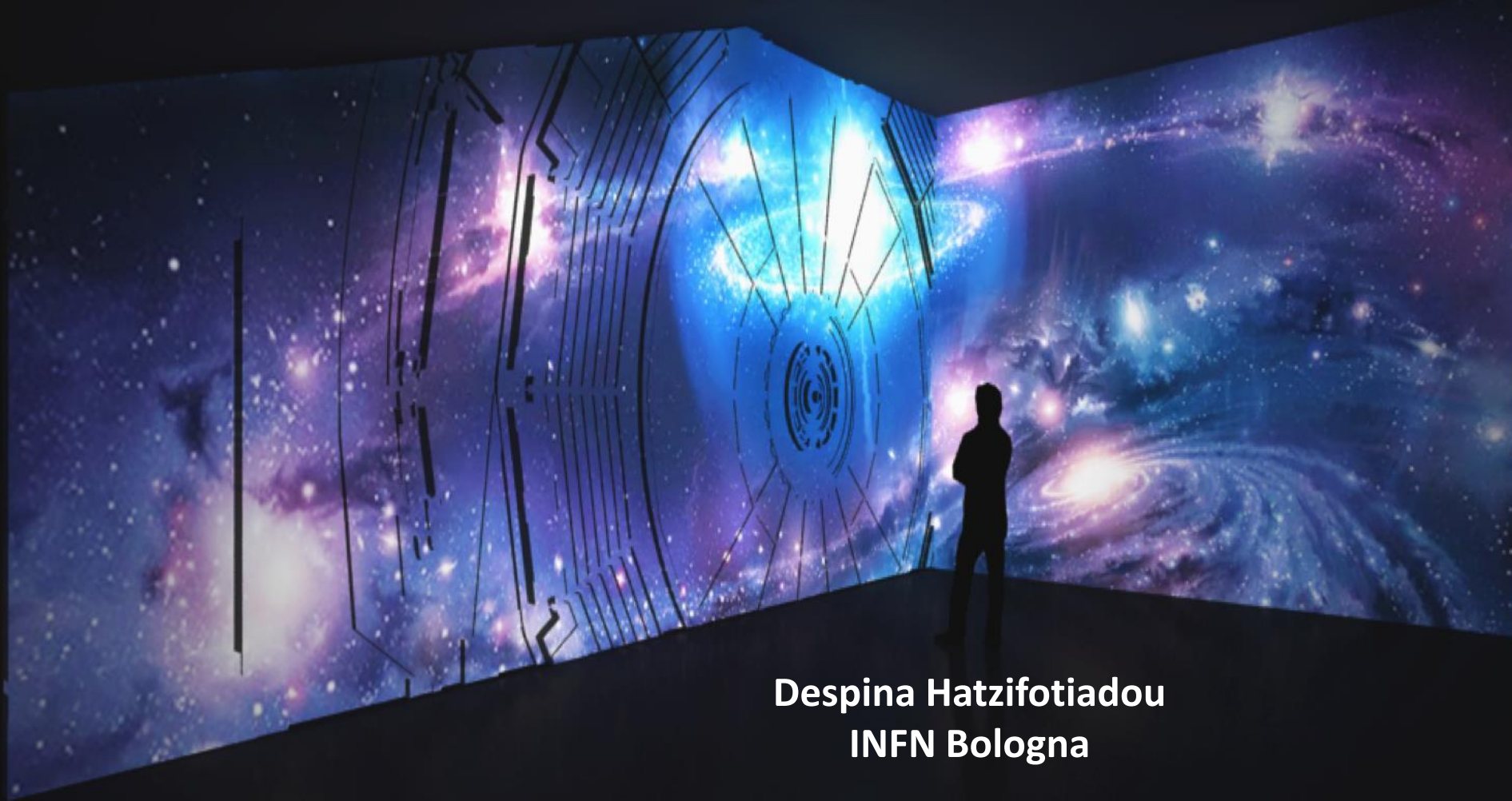


ALICE NEW EXHIBITION AND VIRTUAL VISITS ITINERARY



Despina Hatzifotiadou
INFN Bologna

- Real-size poster of ALICE cross section
 - Explain basic ALICE components

- ARC (ALICE Run Control Centre)
 - Explain LHC operation, data taking
 - See physicists at work

- Interactive Window at ARC
 - Describe ALICE / its components
 - ALICE sociology

- VIEW OF SHAFT, PAD, MAD

- NEW ALICE EXHIBITION





ALICE

ALICE INTERACTIVE WINDOW





ALICE

ALICE INTERACTIVE WINDOW



ALICE Detectors

- Free View
- Size
- Weight
- Inner Detectors
- Outer Detectors
- Muon arm
- Technology



TPC TRD ITS MUON EMCAL PHOS PMD TOF AD ZDC ALL < >




ALICE

ALICE INTERACTIVE WINDOW






 **Collaborators and Projects** 



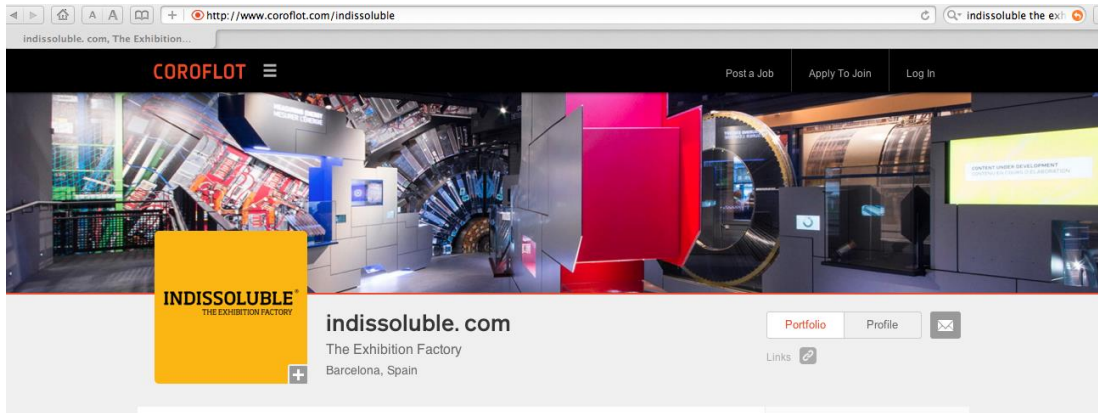
Select a flag to see the details of the associated country.

Select the name of a project to explore it.

To proceed, select the bottom-right arrow.

 **DATA ACQUISITION** Upgrade 02  

- DESIGNED AND REALIZED BY **INDISSOLUBLE**

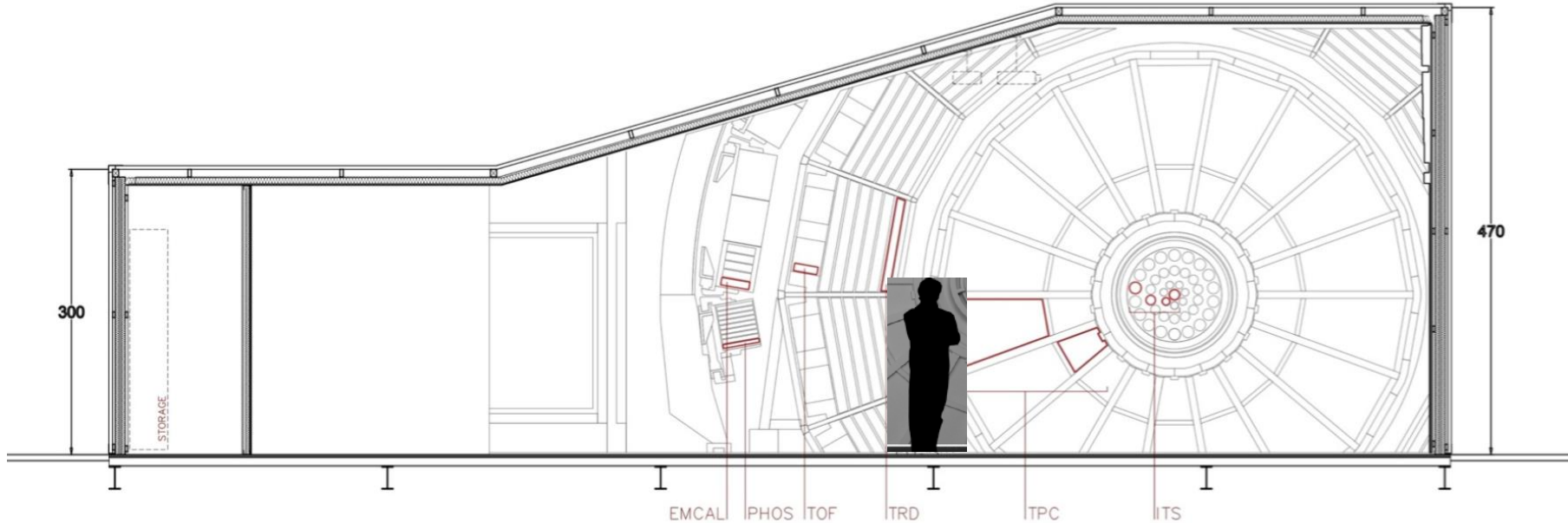


- ALICE OUTREACH AND TECHNICAL COORDINATION
- CERN EDUCATION, COMMUNICATION & OUTREACH
 - Discussions with Emma Sanders & Rolf Landua
- CERN MEDIA LAB (Daniel Dominguez)
- INSPIRED BY SYNCHROCYCLOTRON



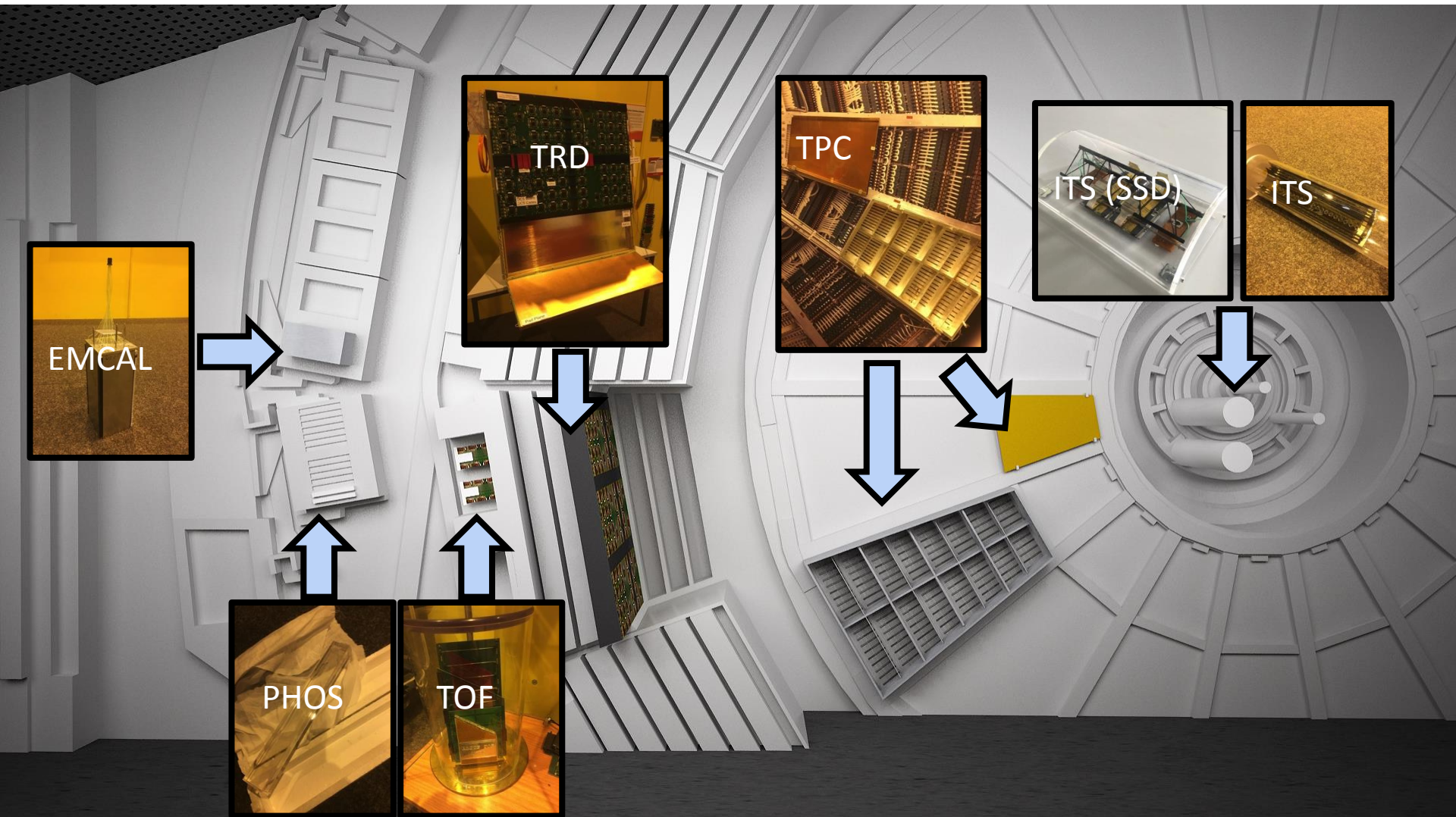


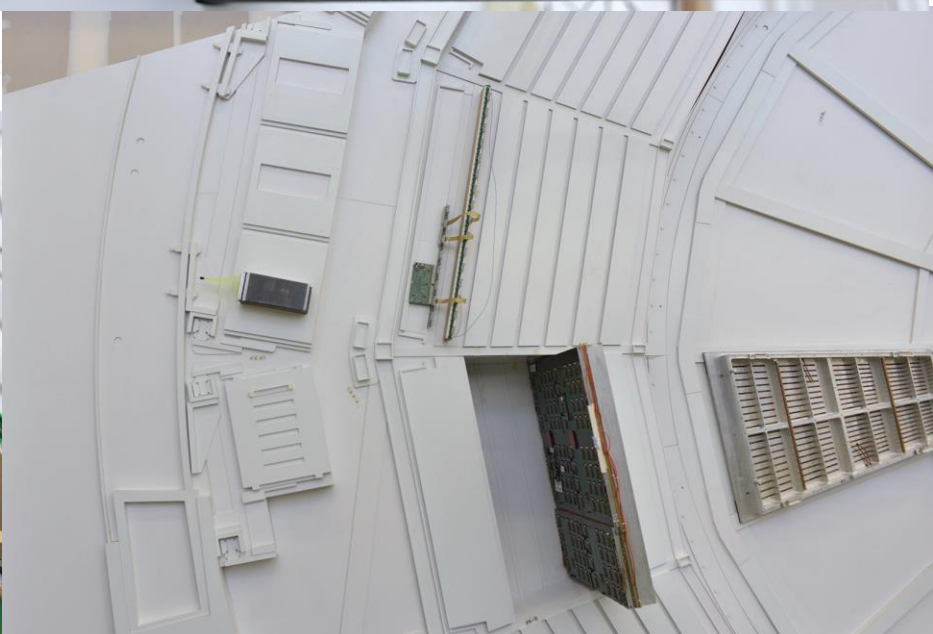
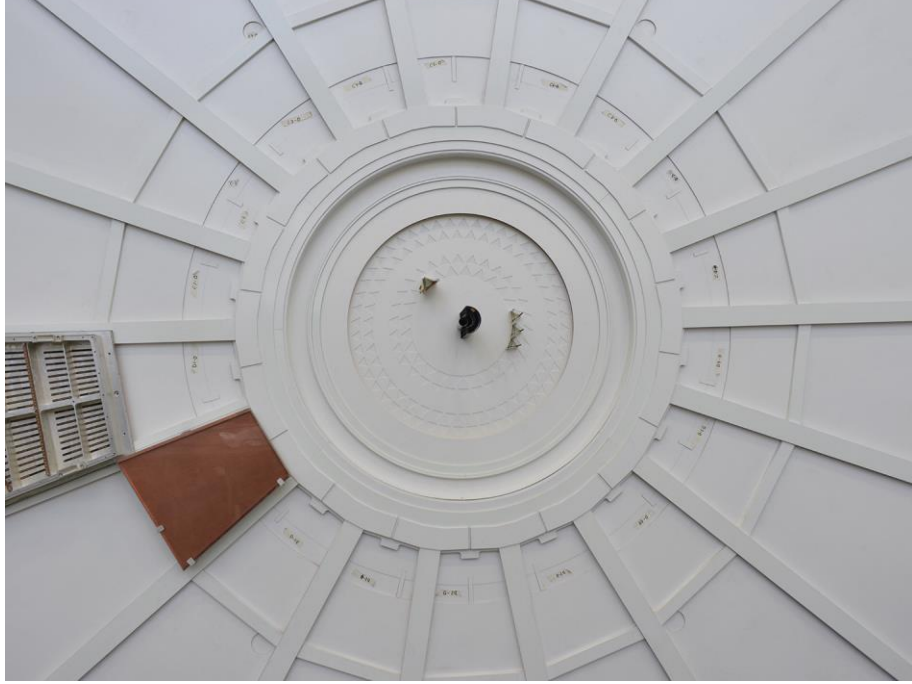
- INSTALL INSIDE CLOSED STRUCTURE
- ~ 100 m² installed above Counting Rooms in SX2
- Ensure acoustic insulation
- Illuminate objects + project introductory film

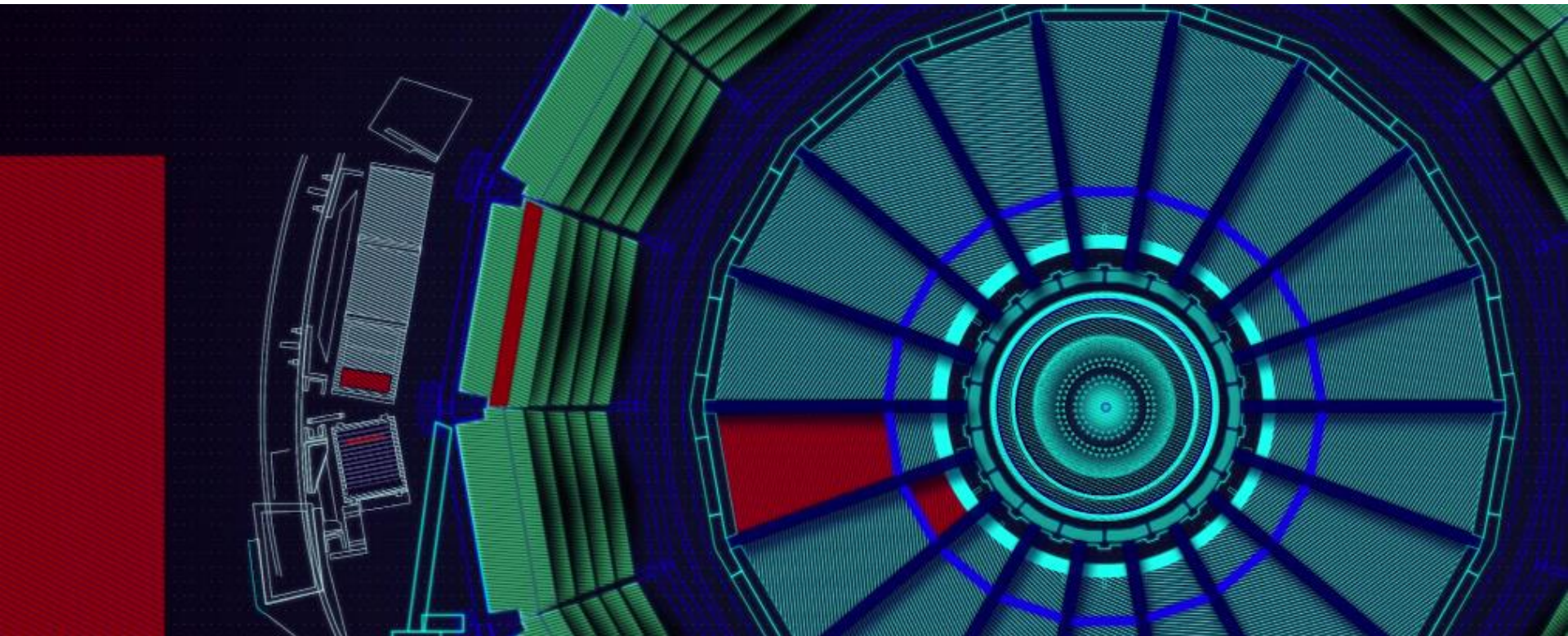


11 m x 5 m wooden mockup
detector objects embedded in
their true position and
orientation

Inner Tracking System (ITS)
Time Projection Chamber readout chambers (TPC)
Transition Radiation Detector (TRD)
Time Of Flight MRPC (TOF)
Photon Spectrometer PbWO₄ crystal (PHOS)
Electromagnetic Calorimeter (EMCal)







- Introductory 7-minute film (on mockup + wall perpendicular to it)
- animation with narration – English and French versions
- 10 more languages to be added (order being placed)
- Developed by Indissoluble and CERN Media Lab
- storyboard by ALICE & CERN IR-ECO (Rolf Landua)





ALICE

SHOWCASES





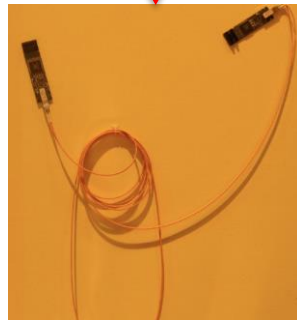
Inner
Tracking
System

SDD

SSD

Readout
and DAQ

DDL and
optical
fibres

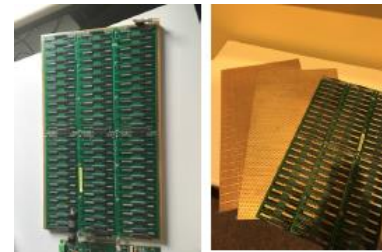
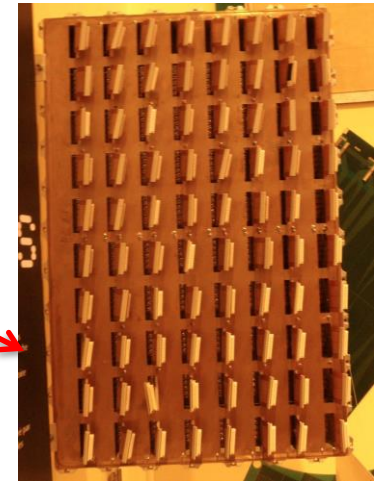



particle
identification

HMPID (RICH)


TOF (MRPC)

PMD






PHOS: PHOTON SPECTROMETER

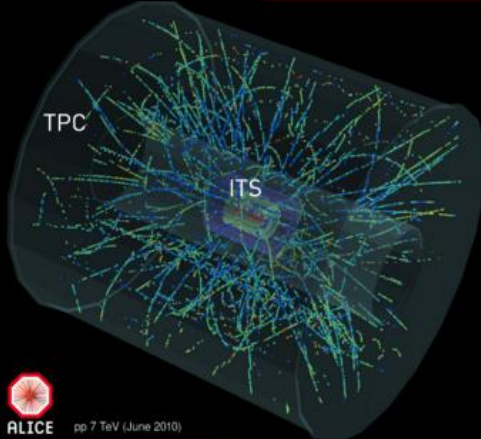


EMCAL: ELECTROMAGNETIC CALORIMETER




DATA ACQUISITION

TRACKING



TPC
ITS



ALICE pp 7 TeV (June 2010)

Charged particles [electrons, pions, kaons, protons,...] produce electric signals in the detectors


Computer algorithms reconstruct the trajectories of these charged particles

PARTICLE IDENTIFICATION


To identify a particle we need to know

- its electric charge
- its mass


A variety of methods using different detection techniques are used for particle identification in ALICE




TRD: TRANSITION RADIATION DETECTOR



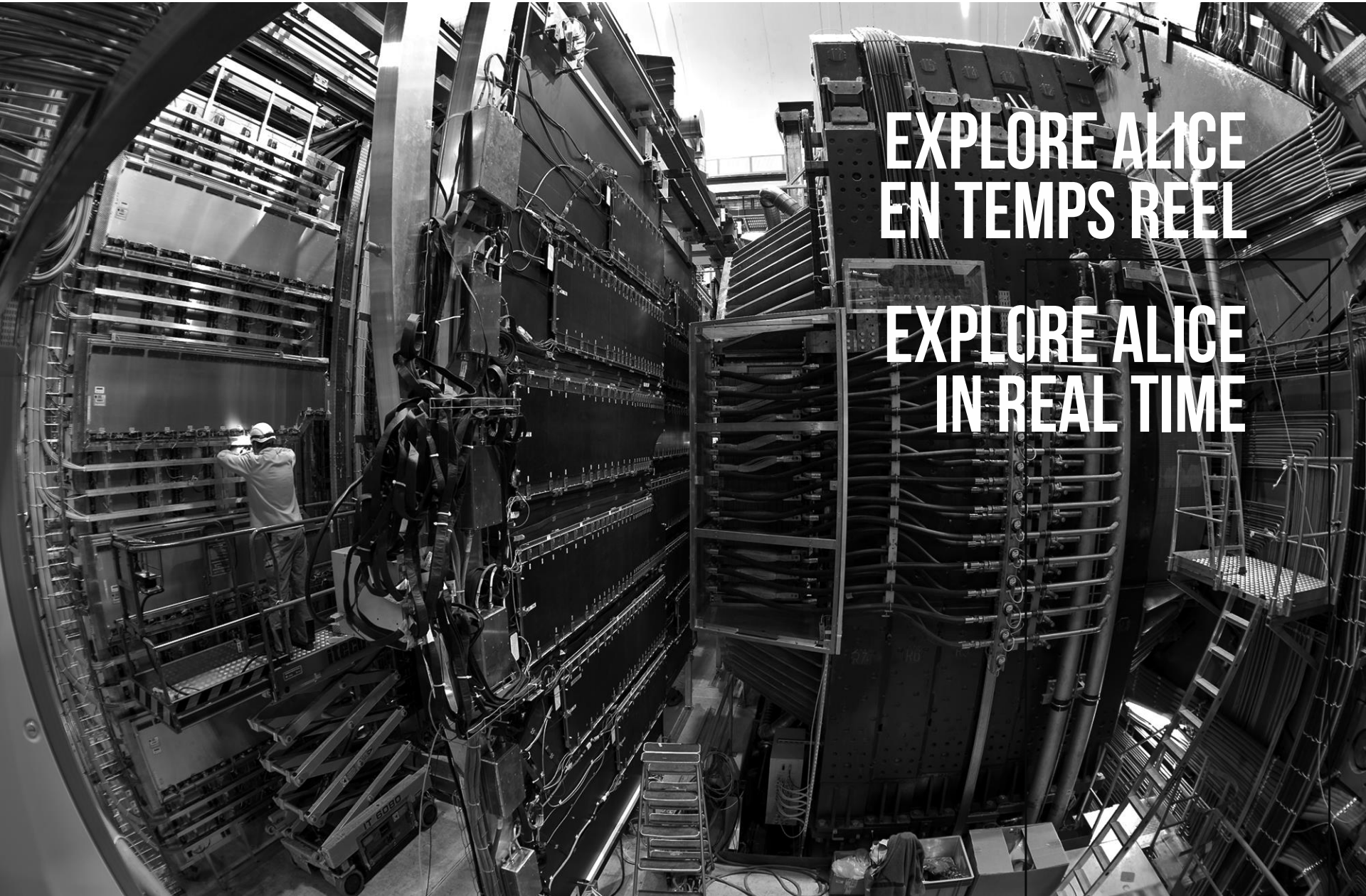
TOF: TIME OF FLIGHT



HMPID: HIGH MOMENTUM PARTICLE IDENTIFICATION



PMD: PHOTON MULTIPLICITY DETECTOR



**EXPLORE ALICE
EN TEMPS REEL**

**EXPLORE ALICE
IN REAL TIME**

EXPLORE ALICE IN REAL TIME (PERISCOPE)



2 cameras in the cavern, connected with pc
In front of solenoid / on the muon spectrometer side
Possibility to choose, rotate and zoom



JANUARY 2018 INAUGURATION

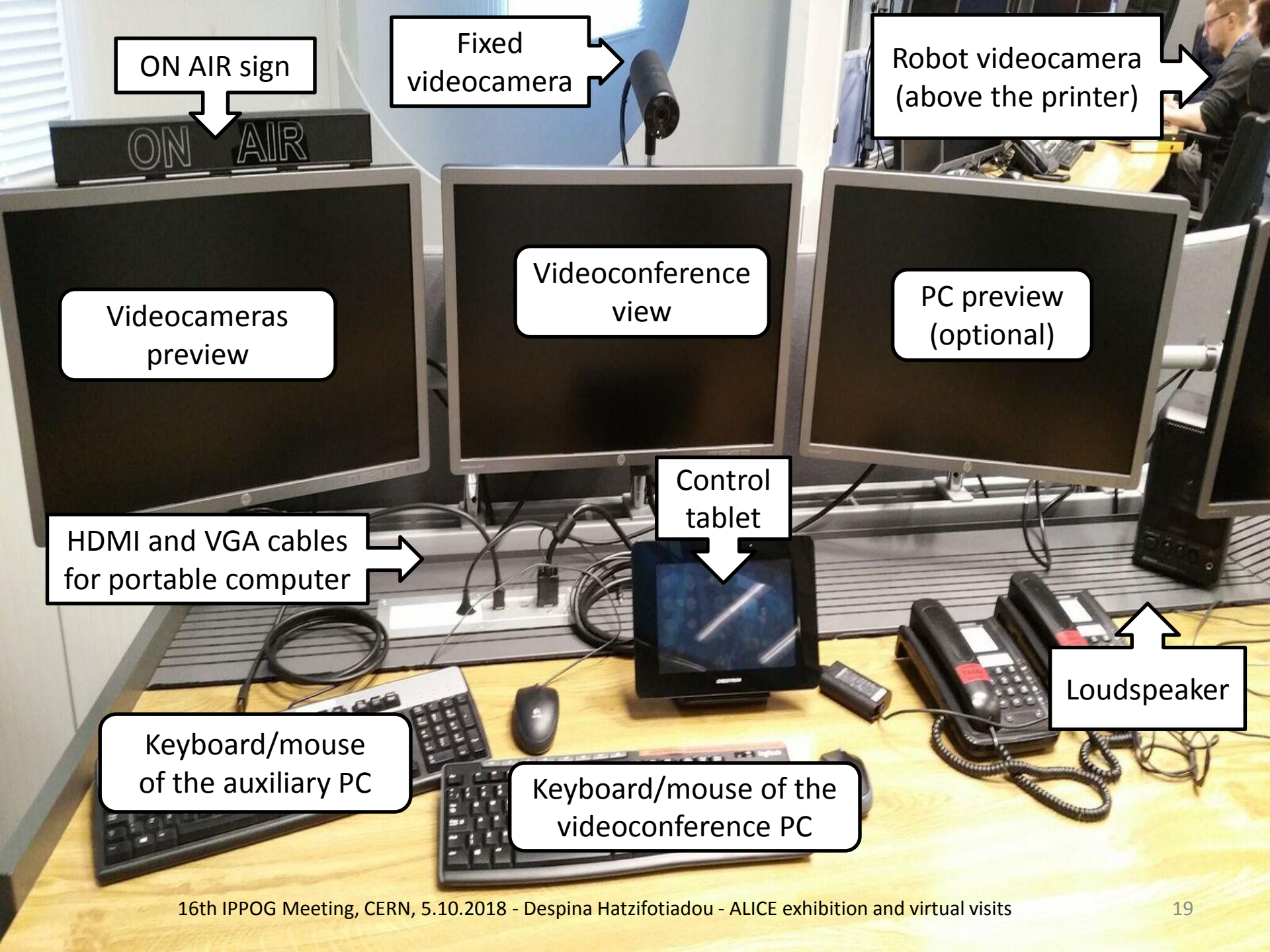
GUIDES TRAINING :

>100 ALICE guides have been trained

- 50 CERN guides have been trained
- Integrated in CERN visits since April 2018
- To visit : alice.visits@cern.ch



ALICE virtual visits



ON AIR sign

Fixed videocamera

Robot videocamera (above the printer)

Videocameras preview

Videoconference view

PC preview (optional)

Control tablet

HDMI and VGA cables for portable computer

Loudspeaker

Keyboard/mouse of the auxiliary PC

Keyboard/mouse of the videoconference PC



Wearable
microphone

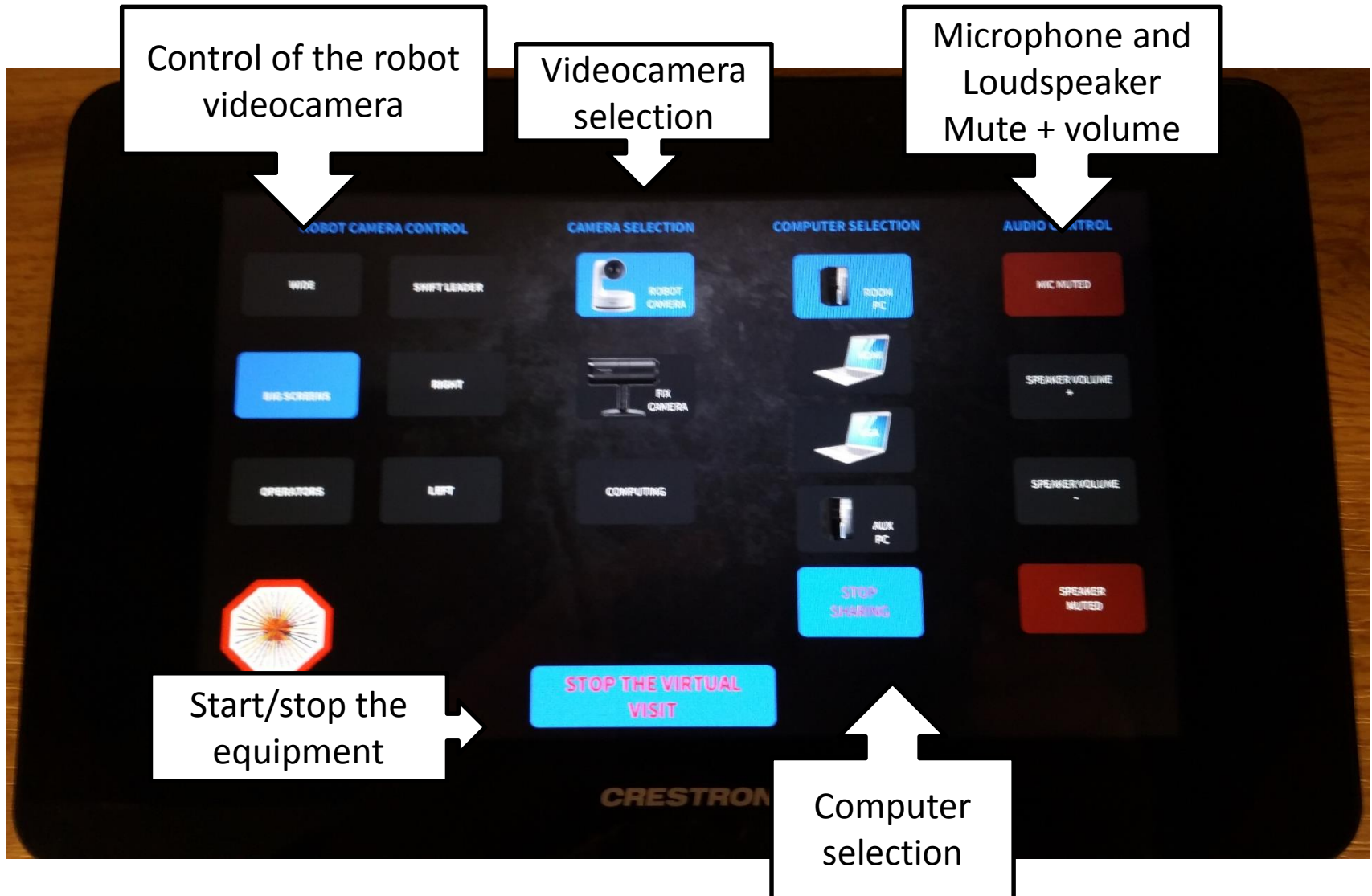


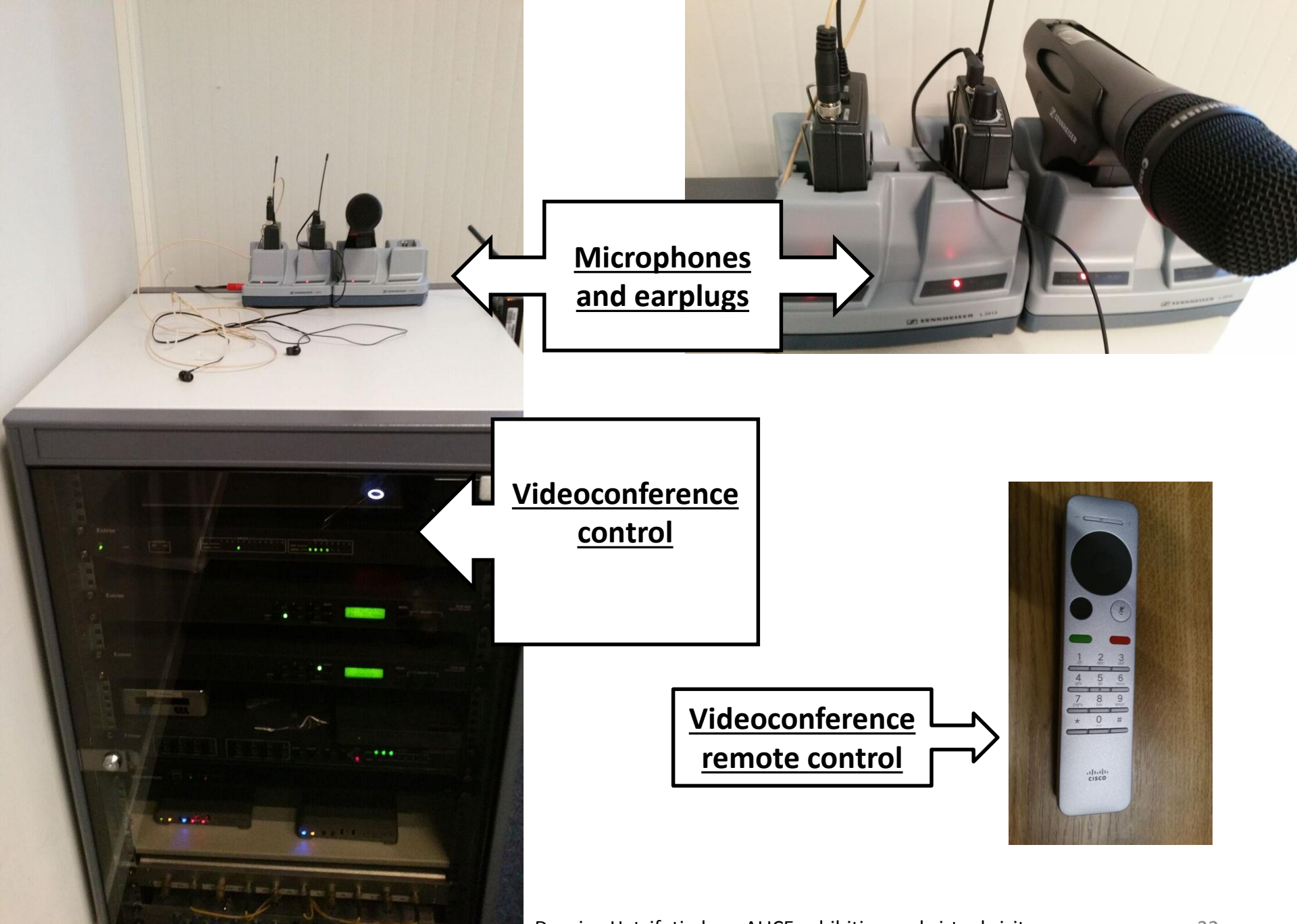
Hand/stand
microphone



Earplugs

Control tablet





Microphones
and earplugs

Videoconference
control

Videoconference
remote control



Handling a Virtual Visit via Indico/Vidyo

- Go to the “ALICE Virtual Visits” category (public)
(Home » Experiments » ALICE Meetings » ALICE virtual visits).
- Clone a previously declared entry.
- Optional: upload/replace the material (presentations, photos, videos, documents) to be used during the visit.

- To start the visit: connect to the Vidyo room “ALICEVV” (same procedure as for a standard Indico event).
- Clients can connect either via the Indico page of the event or via Vidyo directly at the room “ALICEVV”.

October 2018

ALICE virtual visits

 13 Oct [Virtual Visit with Puebla - Django Girls](#) **NEW**

September 2018

 28 Sep [Virtual Visit with Metsovio - Researchers' Night](#)

 28 Sep [Virtual Visit with Cagliari 2- Researchers' Night](#)

 28 Sep [Virtual Visit with Cracow II - Researchers' Night](#)

 28 Sep [Virtual Visit with Cagliari- Researchers' Night](#)

 28 Sep [Virtual Visit with Cracow I - Researchers' Night](#)

 03 Sep [Virtual Visit with Scientix \(EMP\)](#)

July 2018

 09 Jul [Virtual Visit with EKFE Chanion](#)

June 2018

 26 Jun [Virtual Visit with Thessaloniki \(Alkis Hatzopoulos\)](#)

 15 Jun [Saint-Petersburg Summer Practice](#)

April 2018

16th IPPOG Meeting, CERN, 5.10.2018 - Despina Hatzifotiadou - ALICE exhibition and virtual visits

 10 Apr [Saint-Petersburg press conference](#)

Many thanks to:

Roberto Divià (ALICE) for pushing for and following the realization of the project
+ providing ALICE_Virtual_Visits_User_guide
+ training guides

Thomas Baron for the organization

Loic Lavrut and **Mathieu Vivier** for all the hard work (installation + making it all work)

To organise a virtual visit contact

alice-outreach-virtual-visits@cern.ch

THANKS FOR YOUR ATTENTION