

# Plans for the Outreach in A.S. 2020/2021 with the EEE Project

#### Silvia Pisano\*

\*Museo Storico della Fisica e Centro Studi e Ricerche «Enrico Fermi»

INFN – Laboratori Nazionali di Frascati

silvia.pisano@centrofermi.it





### The outreach group!

Thanks to Marina, Marta, Paola, Daniele and Kristian for joining!



#### Bureaucracy

- o 32/100 agreements signed
- o For the local referents: please give feedbacks about schools that are not to be considered for a renewal
- o PTCO will follow
- o Other formats for participation: «crediti formativi» under evaluation



#### Run Coordination Meetings

The format «general talk + question time» turned out to work very well during the lockdown.

For the restarting of the EEE Project (*i.e.* in the second semester of A.S. 2020/2021), a mixed solution with a general talk + question time (shorter than the latest!) + possible contributions by schools can be considered.

Speaker at the next Run Coordination Meeting: **Dr. K. Piscicchia** (grazie!) → Quantum Mechanics

Speakers to invite for future meetings:

- 1. E. Coccia  $\rightarrow$  gravitational waves
- 2. M. Colpi  $\rightarrow$  black holes
- 3. P. Blasi (GSSI)  $\rightarrow$  Cosmic Ray theory
- 4. M. Capaccioli → «L'incanto di Urania» (history of astronomy)
- 5. M. Focaccia → history of physics (Laura Bassi)



#### Run Coordination Meetings

The format «general talk + question time» turned out to work very well during the lockdown.

For the restarting of the EEE Project (*i.e.* in the second semester of A.S. 2020/2021), a mixed solution with a general talk + question time (shorter than the latest!) + possible contributions by schools can be considered.

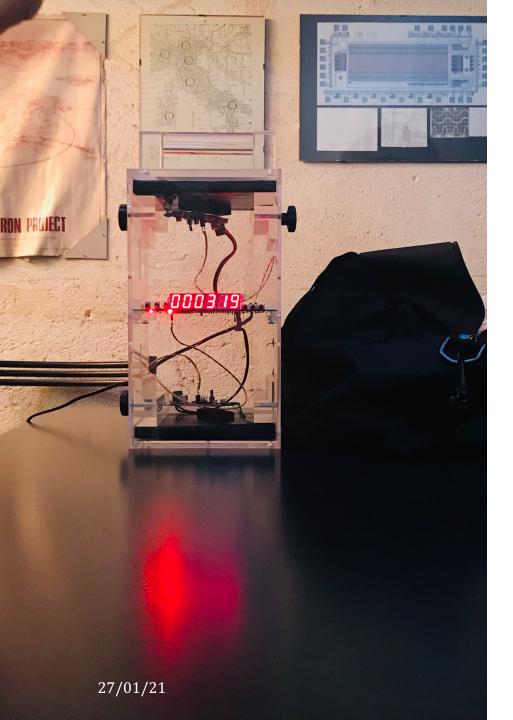
Speaker at the next Run Coordination Meeting: **Dr. K. Piscicchia** (grazie!) → Quantum Mechanics

Speakers to invite for future meetings:

# Suggestions about possible speakers are welcome!

- 1. E. Coccia  $\rightarrow$  gravitational waves
- 2. M. Colpi  $\rightarrow$  black holes
- 3. P. Blasi (GSSI)  $\rightarrow$  Cosmic Ray theory
- 4. M. Capaccioli → «L'incanto di Urania» (history of astronomy)
- 5. M. Focaccia → history of physics (Laura Bassi)

27/01/21 EEE meeting 5



#### **Cosmic Box Contest**



SegreteriaEEE is in contact with the winners of the past edition to arrange the delivery of the cosmic boxes:

- 1. Una comic box per studiare la dipendenza del flusso muonico dall'altitudine Scuole: Liceo Grassi (SV) - Liceo Chiabrera (SV) - Liceo Calasanzio (Carcare, SV)
- 2. Cosmic Box Contest Scuola: Lieo Pascal (Pomezia, RM)
- 3. Cosmic Box e Pausilypon Scuola: IIS Luca Pacioli (Sant'Anastasia, NA)
- 4. Progetto per attività sperimentale-didattica con Cosmic Box Scuola: Liceo Onesti (Fermo)
- 5. Progetto Cosmic Box Scuola: Liceo Galilei Lanciano (CH)
- 6. Progetto Cosmic Box Scuola: Liceo Da Vinci (Trento)
- 7. Raggi comici a San Clemente Scuola: Liceo Cavour (RM)

EEE meeting



#### A Netflix-like idea

#### ...for stimulating the restarting of the data-taking activity

We propose a web-serie composed of 10 short episodes, with the plot «how to restart an EEE station». Each episode will consist in a **short video** where one of the main components of the data taking system is turned on, and the different steps and checks to be done at that stage are described.

Each episode will be roughly 3 minute long.

- 1. Preliminary checks of the environment (power system, meteo conditions)
- 2. The cabling
- 3. The gas system
- 4. The power system (aka: are all the lights that should be ON really ON? E.g. FEA's)
- 5. Turning on a chamber (by slowly increasing the HV!)
- 6. Check of the coincidence rate (single, double or triple-chamber)
- 7. The daily Check List
- 8. The remote control: how to connect to the local pc and verify the working conditions of the telescope
- 9. Operating a telescope from home: how to start and manage data acquisition remotely
- 10. Checking single run distributions (TDC, multiplicity etc)



#### A Netflix-like idea

#### ...for stimulating the restarting of the data-taking activity

We propose a web-serie composed of 10 short episodes, with the plot «how to restart an EEE station». Each episode will consist in a **short video** where one of the main components of the data taking system is turned on, and the different steps and checks to be done at that stage are described.

Each episode will be roughly 3 minute long.

- 1. Preliminary checks of the environment (power system, meteo conditions)
- 2. The cabling
- 3. The gas system
- 4. The power system (aka: are all the lights that should be ON really ON? E.g. FEA's)
- 5. Turning on a chamber (by slowly increasing the HV!)
- 6. Check of the coincidence rate (single, double or triple-chamber)
- 7. The daily Check List
- 8. The remote control: how to connect to the local pc and verify the working conditions of the telescope
- 9. Operating a telescope from home: how to start and manage data acquisition remotely
- 10. Checking single run distributions (TDC, multiplicity etc)

Pilot episode:
Wednesday 3°,
February @Centro
Fermi

with M. Garbini, S. Pisano Director: M. Pepe



#### A Netflix-like idea

#### ...for stimulating the restarting of the data-taking activity

We propose a web-serie composed of 10 short episodes, with the plot «how to restart an EEE station». Each episode will consist in a **short video** where one of the main components of the data taking system is turned on, and the different steps and checks to be done at that stage are described.

Each episode will be roughly 3 minute long.

- 1. Preliminary checks of the environment (power system, meteo conditions)
- 2. The cabling
- 3. The gas system
- 4. The power system (aka: are all the lights that should be ON really ON? E.g. FEA's)
- 5. Turning on a chamber (by slowly increasing the HV!)
- 6. Check of the coincidence rate (single, double or triple-chamber)
- 7. The daily Check List
- 8. The remote control: how to connect to the local pc and verify the working conditions of the telescope
- 9. Operating a telescope from home: how to start and manage data acquisition remotely
- 10. Checking single run distributions (TDC, multiplicity etc)

If you want to contribute to some episodes please let us know: you are welcome!



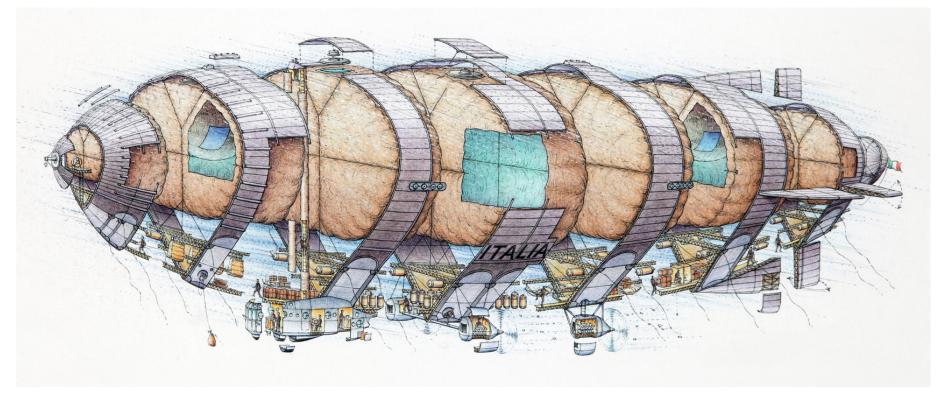
#### The LOGO contest



https://www.litaliaalpolonord.it/

The association «L'Italia al Polo Nord» would like to include our experiment to their partner's website list.

A new logo can be prepared for the experiment, proposing a contest to the schools as done for PolarQUEEEst.





#### The EEE trailer

D. De Gruttola is preparing a new trailer dedicated to the EEE Project. We would like to actively involve schools in the project.

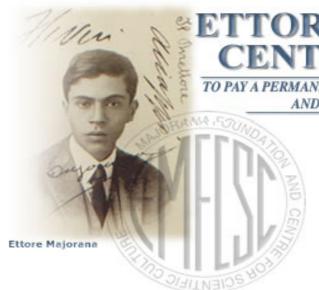
A story-board is in preparation (it will be circulated as soon as the preliminary draft will be ready).

#### Content-flow:

- o Starting picture with a cosmic ray
- Entering the school
- o Entering the Lab
- o 3D simulation of the data taking
- Interviews
- Final scenes with students



#### Other initiatives



## ETTORE MAJORANA FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE

TO PAY A PERMANENT TRIBUTE TO ARCHIMEDES AND GALILEO GALILEI, FOUNDERS OF MODERN SCIENCE AND TO ENRICO FERMI, THE "ITALIAN NAVIGATOR", FATHER OF THE WEAK FORCES

#### Materclasses:

- 1. Data Quality Monitor
- 2. Data Analysis
- 3. ROOT
- 4. Statistics
- 5. Simulations

# Masterclasses in May 2021?

**«Conferenza del Progetto EEE»** online or in person in Erice (but, at the moment, with a limited number of participants, N < 70)  $\rightarrow 5-10$  Dicembre 2021

possible measurements can be organized with mixed groups composed of some students in person (responsible for data taking) and some online (responsible for data analysis)



Talk opportunity@LHCP2021