

Outreach Round Table

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ePIC Physics Readiness Workshop
Cosenza, March 18th 2026

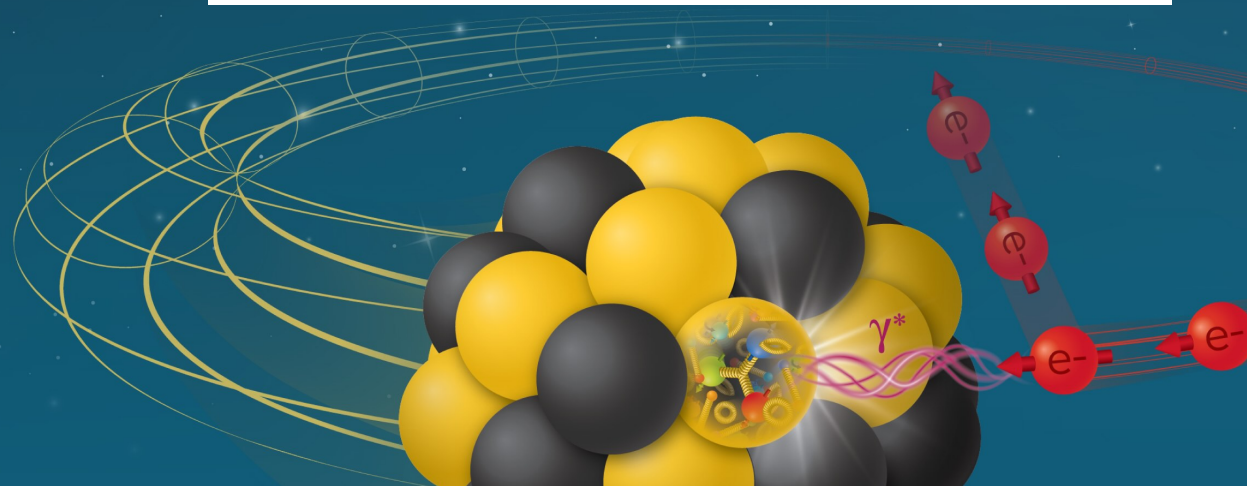
Mailing list:

eic-outreach-wg@lists.bnl.gov,

Website (soon):

<https://wiki.bnl.gov/EPIC/index.php?title=EICOutreach>

Electron-Ion Collider 



Why to have a round table on outreach during a Physics Readiness Workshop?

Because we need help from the PWG!



«Hands on» activities targeting people of all ages are more effective if based on

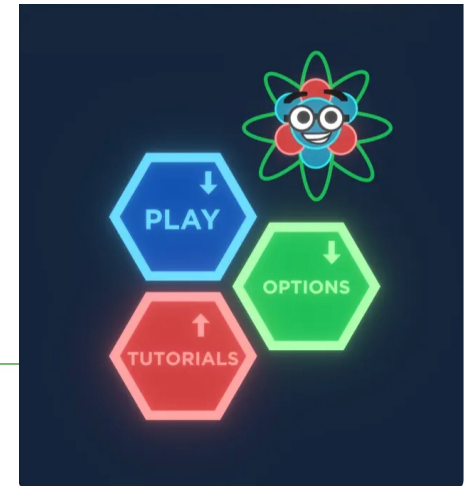
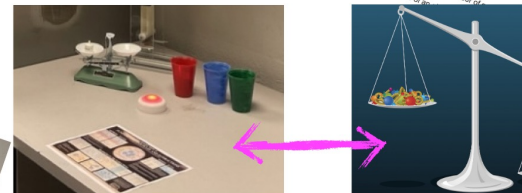
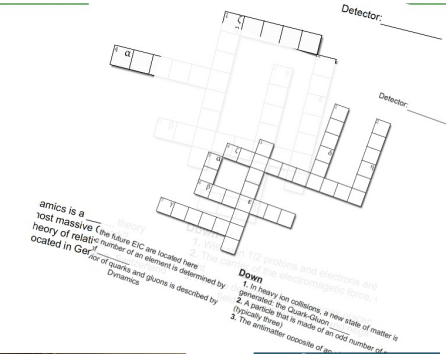
- platforms
- apps
- algorithms
- running code
- event display
- images
- ...

Computer Programming
Computer code is a language used to communicate with computer processor. (Today we will use Python!)

Histograms
Let's make some plots!
Question: What grade are you?

Energy/Momentum Conservation
Fundamental constraint
Let's "smear" our results
Make a 2D histogram of Detector vs. True Energy:

Where does the hadron mass come from?
• Up quark mass ~ 2 MeV
• Down quark mass ~ 5 MeV
• Proton mass ~ 1000 MeV
Where does the "missing" mass of the proton come from???



Cell 2: Code (Importing libraries)

```
Python
import numpy as np
import matplotlib.pyplot as plt

print("Libraries loaded successfully!")
```

Cell 3: Code (Defining variables and calculations)

```
Python
# Constants
g = 9.81 # gravitational acceleration (m/s^2)
v0 = 0 # initial velocity
s0 = 0 # initial position

# Time: from 0 to 5 seconds with 100 data points
t = np.linspace(0, 5, 100)
```

- International masterclass format
- Examples of «**hands on**» activities worldwide!



<p>Che particella è?</p> <p>Dentro il sistema Particle ID di ePIC</p>		<p>Vi presento ePIC! A CATANIA!</p>
<p>Quanta energia hanno le particelle?</p> <p>IL RUOLO DEL CALORIMETRO DI ePIC</p>		<p>Vi presento ePIC! A COSENZA!</p>
<p>Come seguiamo le particelle?</p> <p>Dentro il sistema di tracciamento di ePIC</p>	<p>Vi presento ePIC! A SALERNO!</p>	
<p>ePIC il rivelatore del futuro EIC</p>		<p>CHE COS'E' EIC? Un nuovo acceleratore</p>

	<p>Vi presento ePIC! A ROMA!</p> <p>30 Aprile Dipartimento di Fisica della Sapienza Università di Roma LE REGISTRAZIONI SONO APERTE!</p> <p>ePIC</p>	
<p>Vi presento ePIC! A CATANIA!</p> <p>28 Aprile Dipartimento di Fisica e Astronomia "E. Majorana" di UniCatania LE REGISTRAZIONI SONO APERTE!</p> <p>ePIC</p>		<p>Vi presento ePIC! A BARI!</p> <p>15 Aprile Dipartimento di Fisica di UniBA VI ASPETTIAMO!</p> <p>ePIC</p>

