An Interactive Learning Unit about PET

Positron-Emission-Tomography

Sarah Zoechling | sarah.zoechling@cern.ch

Interactive learning units are a new, virtual, and versatile format for **classroom and distance learning**

MOTIVATION

COVID-related challenges for our visitors to come to CERN

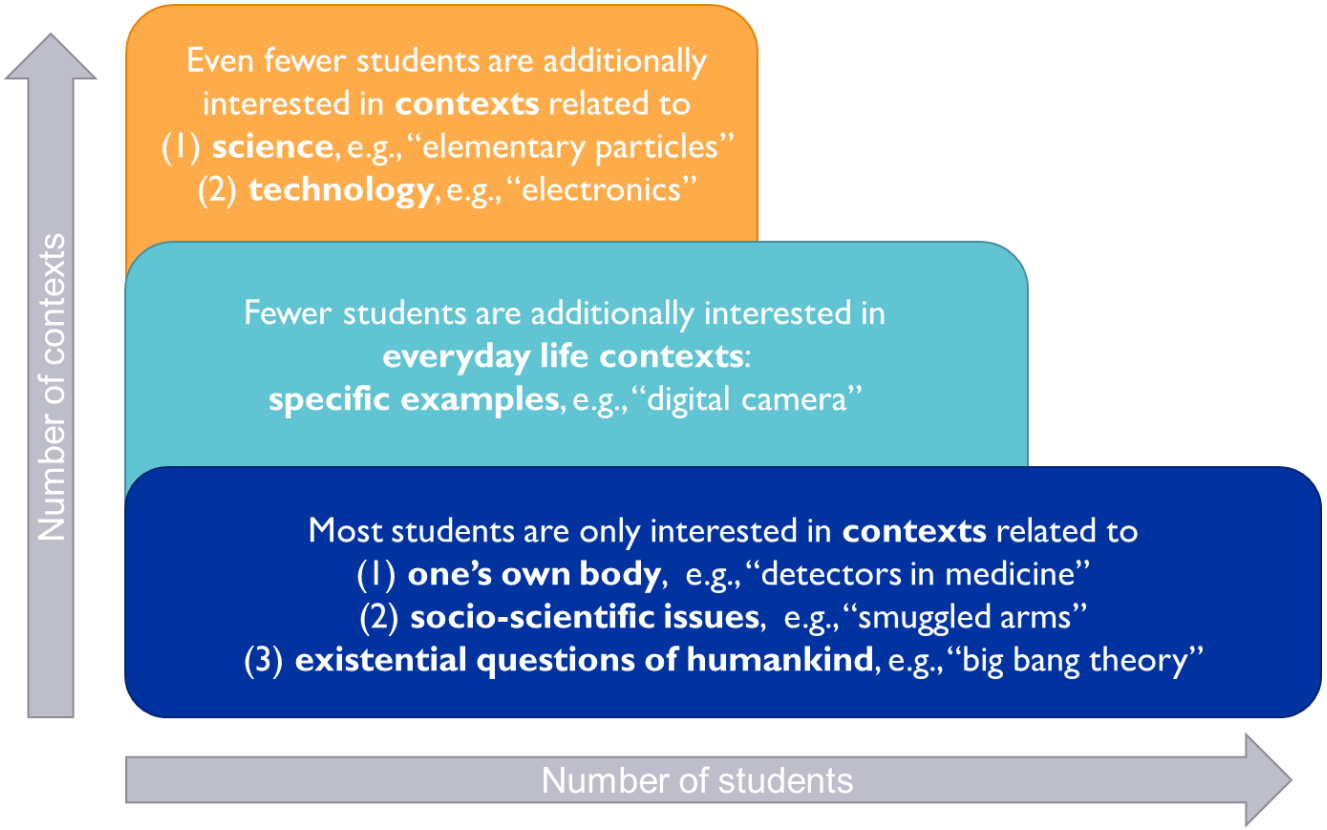
Enhancement of our online offers beyond the pandemic times

Extension of the hands-on PET workshop in our lab

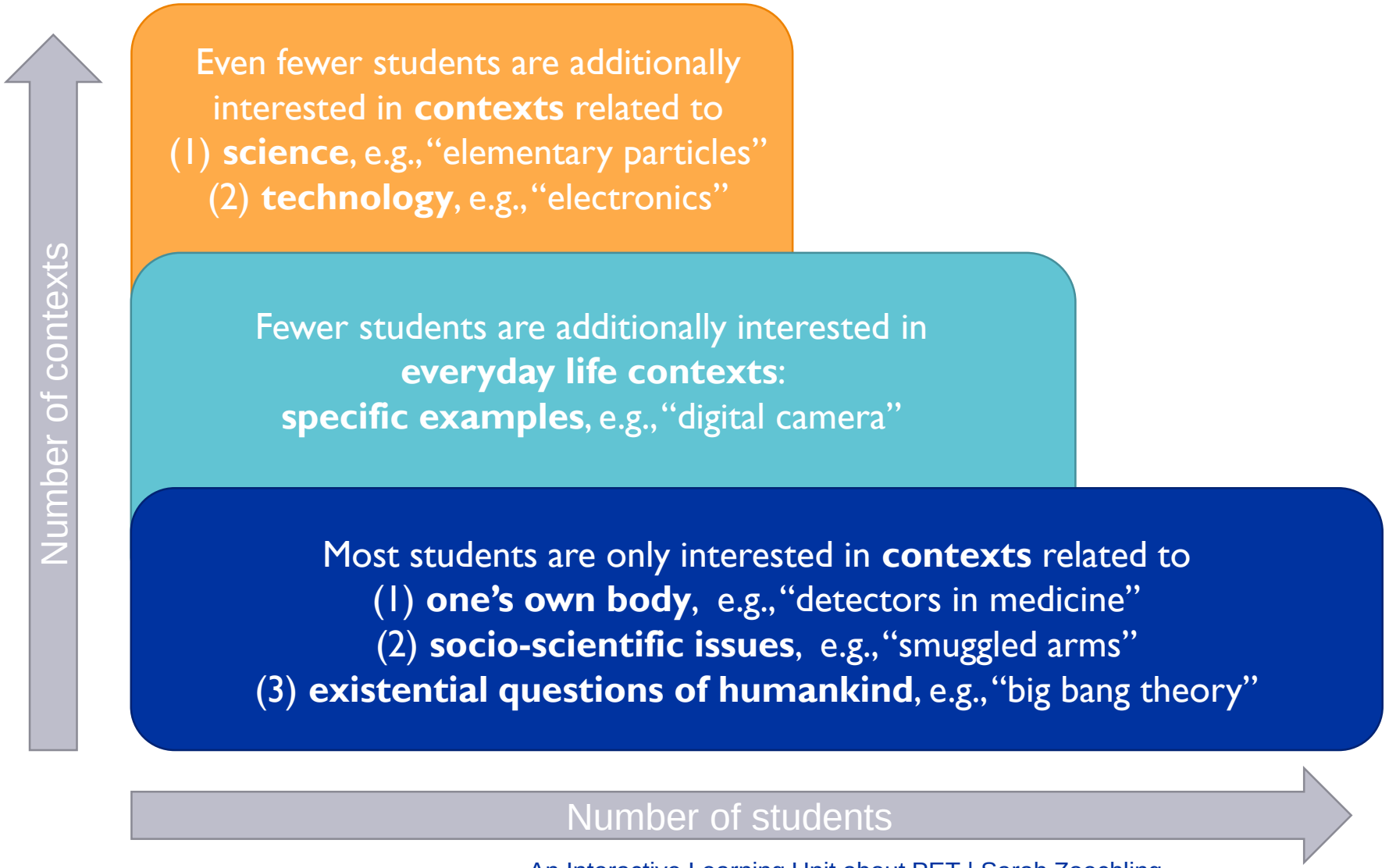
AIM #1

Foster students' interest in particle physics!

- **Past empirical studies:**
  Most students are interested in medical contexts
  OECD (2016), Levrini et al. (2017)
- **My PhD project:**
  Conceptualisation of interest in Particle Physics
  Zöchling et al. (2022)



Conceptualisation of Interest in Particle Physics



AIM #2

Easy to use for teachers in classroom and distance learning

- **Duration:** 2 school lessons
- Can be done on one's **own laptop or tablet**, in the **school IT room** or with **school tablets**
- **Target age:** 16+

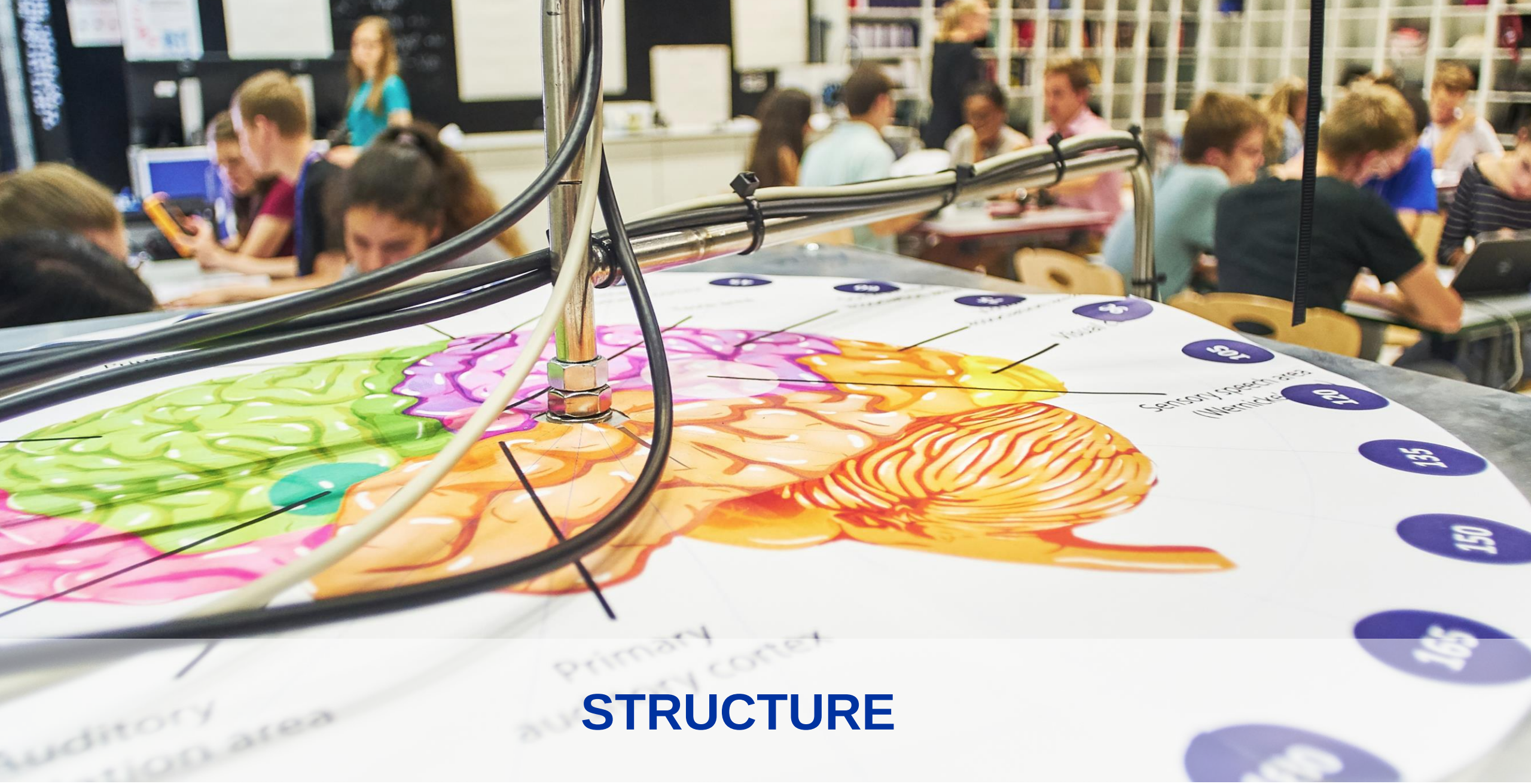
AIM #2

Easy to use for teachers in classroom and distance learning

- **Format:** H5P Module
  - ⇨ Can be easily **embedded in learning platforms** (e.g., Moodle, Blackboard, Brightspace, ...)
- **Link**: cern.ch/petworkshop

LANGUAGE

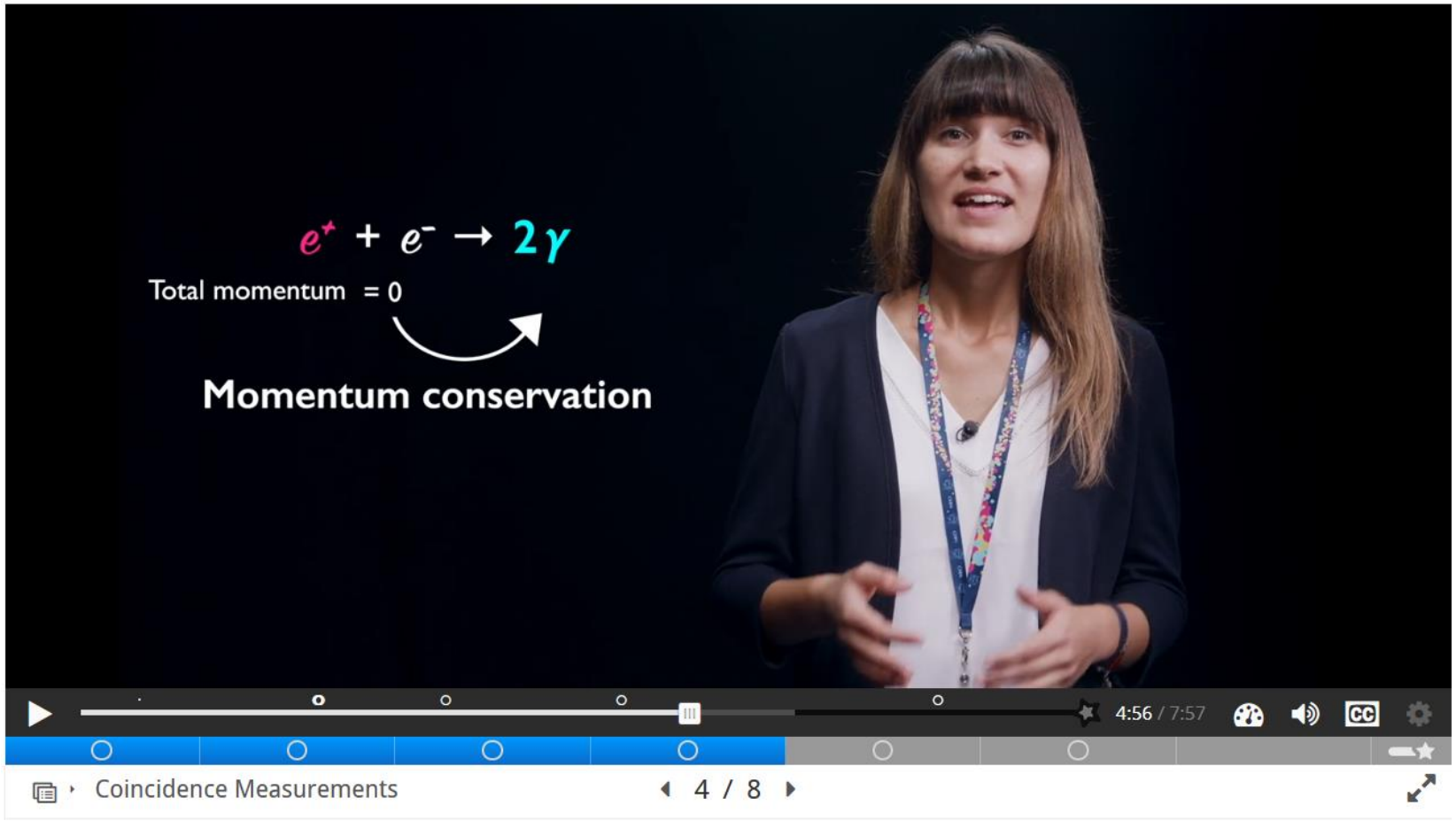
- **English**
- **Subtitles in different languages**



STRUCTURE

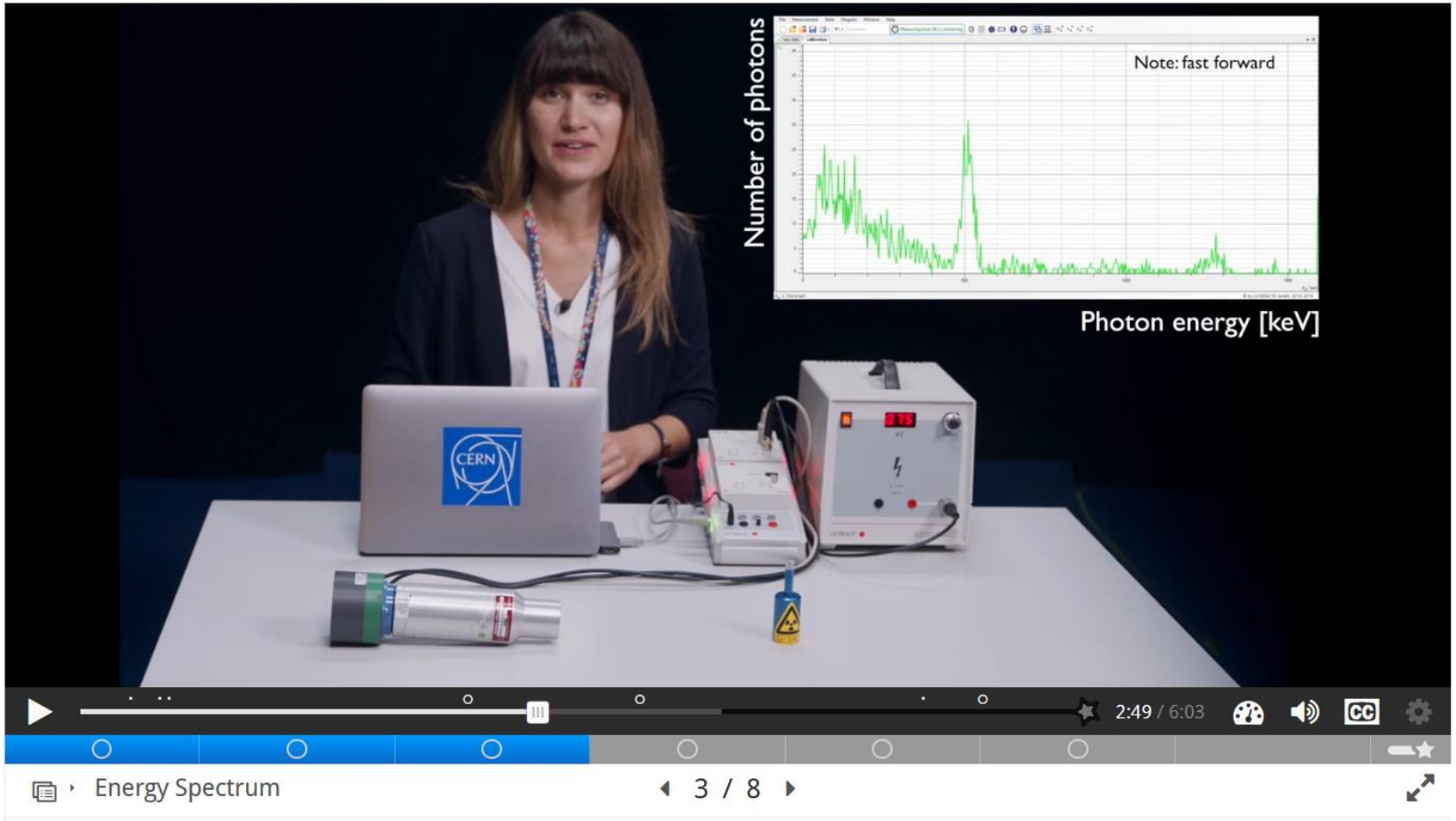
STRUCTURE

Explanatory Videos



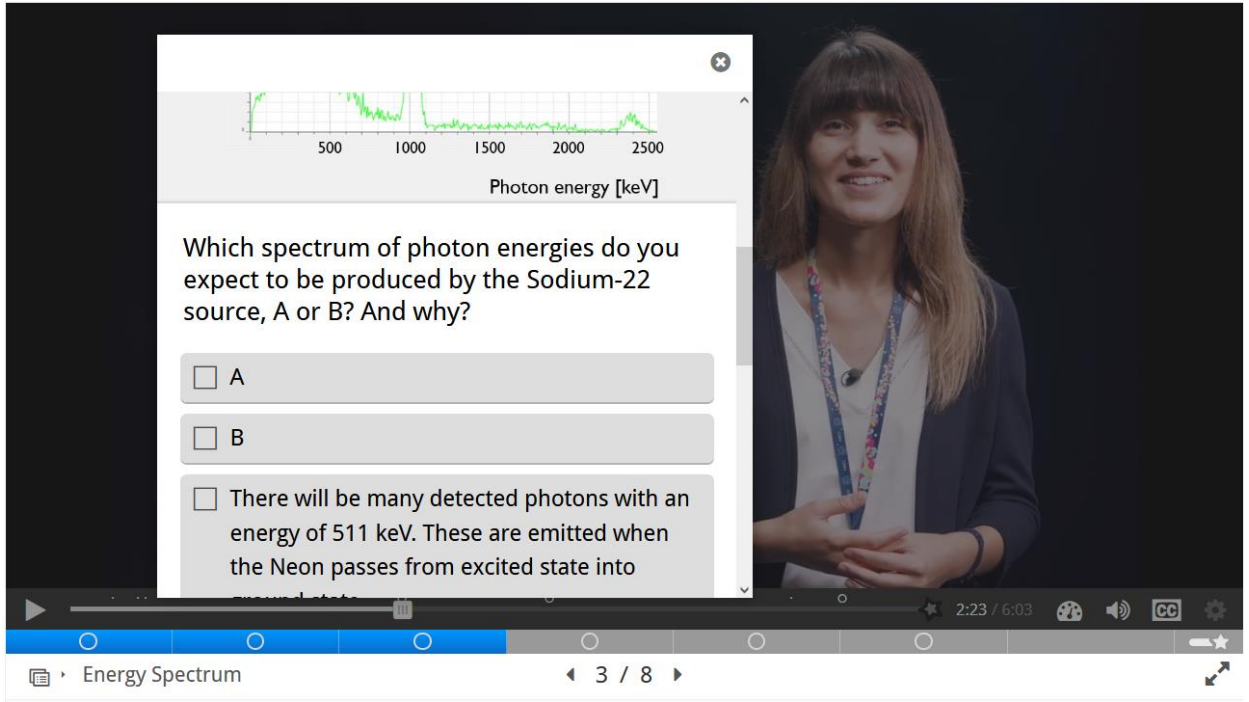
STRUCTURE

Experiment Videos

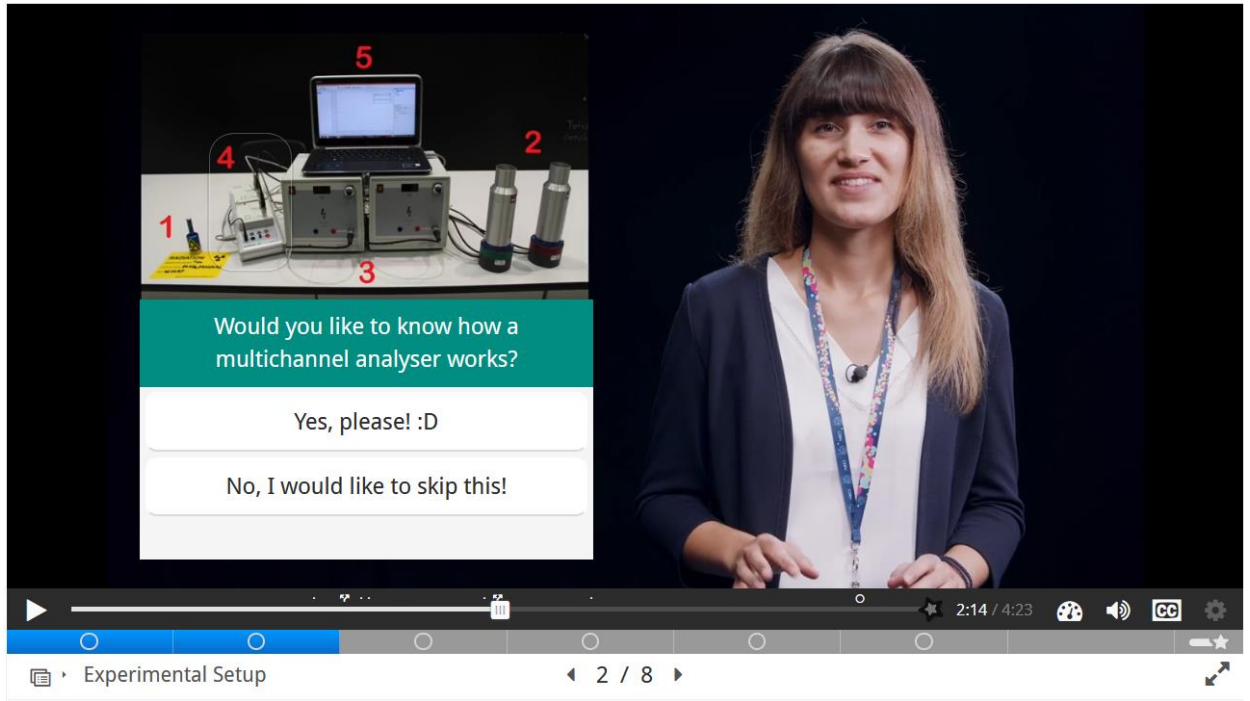


STRUCTURE

Interactive Elements



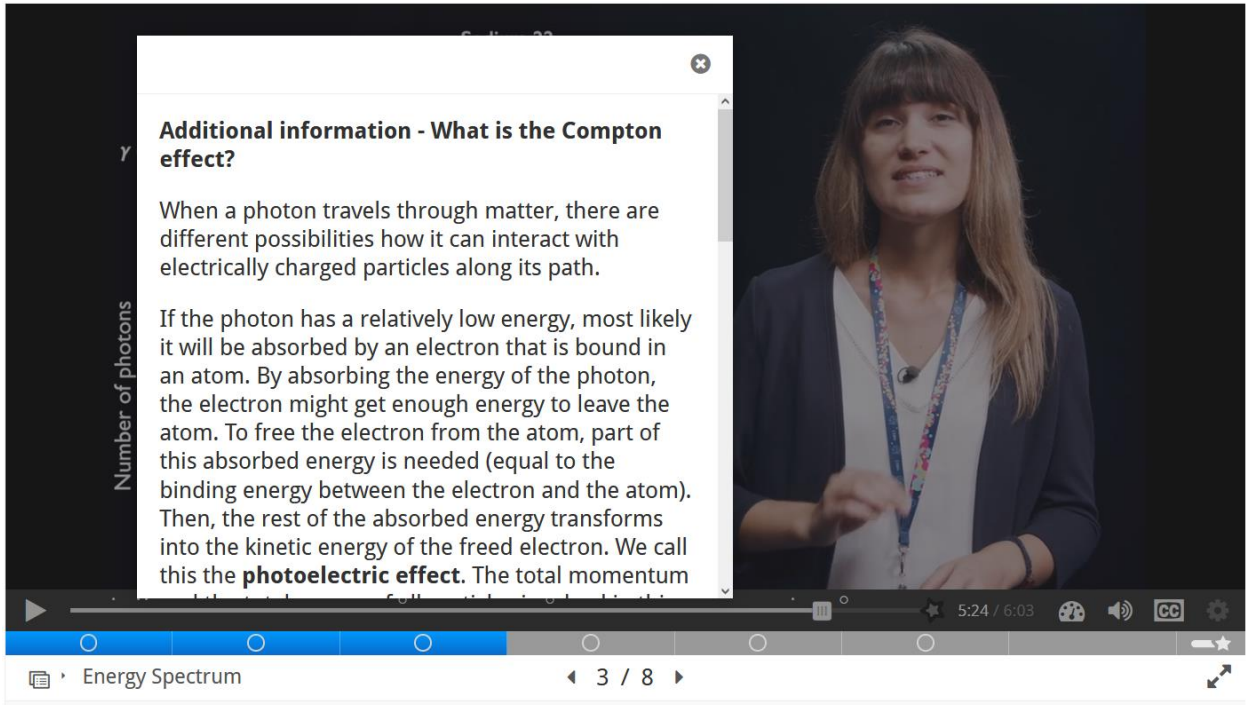
Quizzes



Shortcuts

STRUCTURE

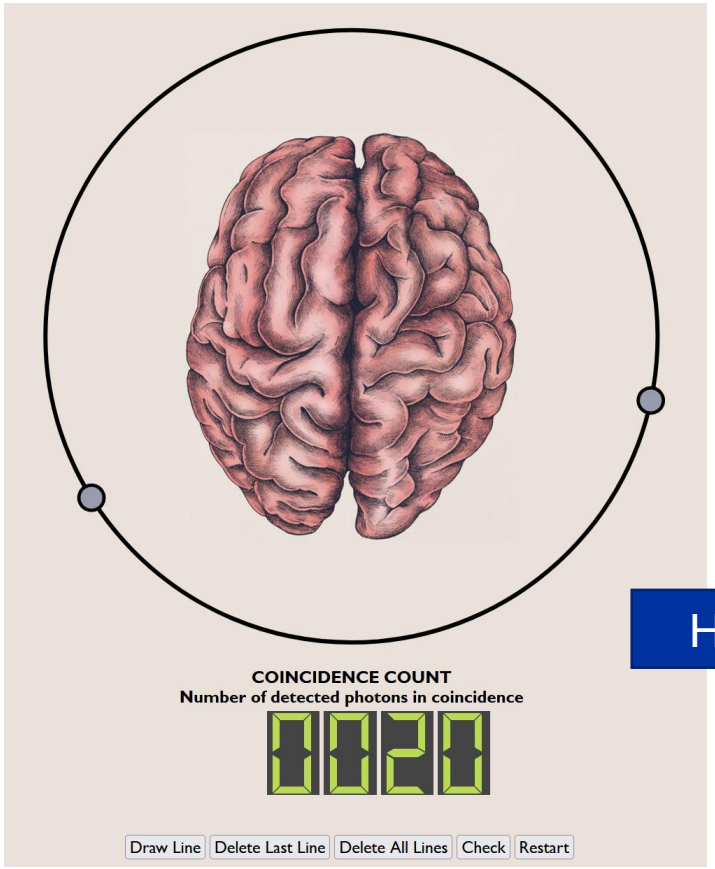
Interactive Elements



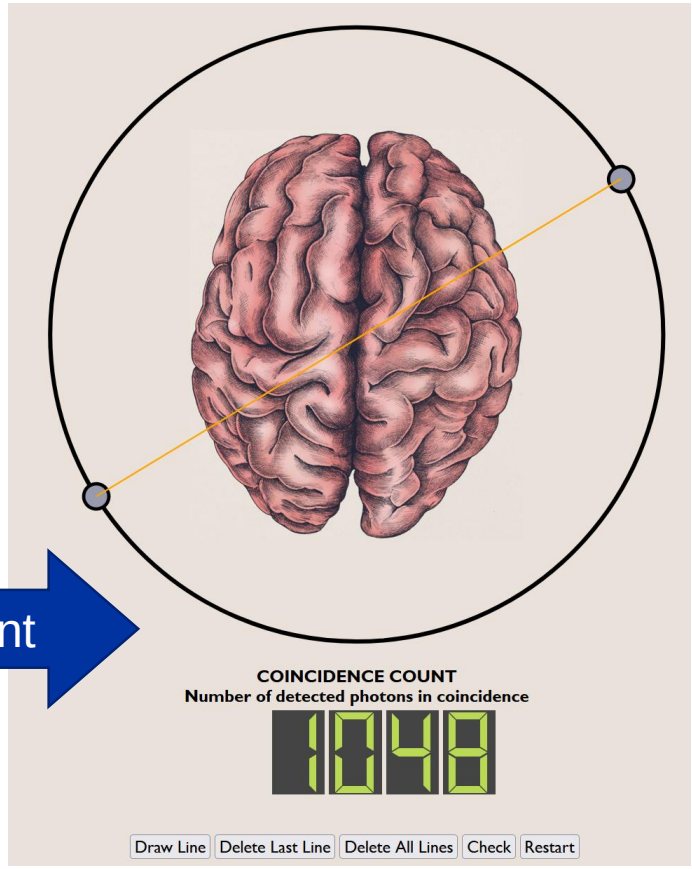
Additional Information

STRUCTURE

Interactive PET Experiment

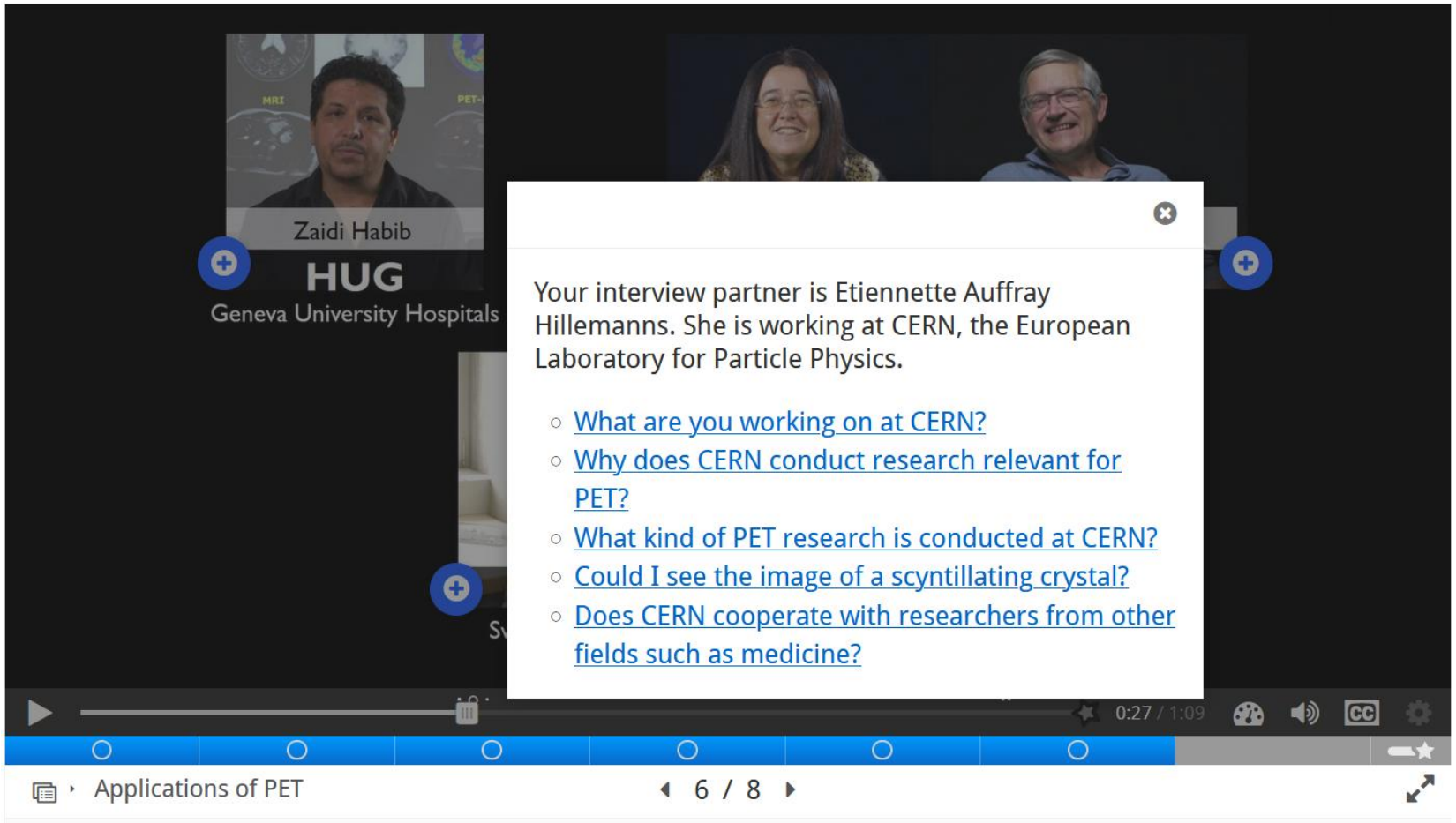


High Coincidence Count



STRUCTURE

Interviews with Experts



NEXT STEPS

- **Subtitles:**
  Adding further languages

- **Advertisement:**
  Spreading the Interactive Learning Unit about PET among educators

- **Physics Education Research:**
  A new PhD project aims
  - to **evaluate** the Interactive Learning Unit about PET and
  - to **develop** further Interactive Learning Units

If you have further questions or comments,

please contact me! :)

Sarah Zoechling | sarah.zoechling@cern.ch