# IPPOG EXHIBITS

WORKING GROUP -BRAINSTORM 3<sup>RD</sup> OCTOBER 2018

**EMMA SANDERS** 

### EXHIBIT BRAINSTORM

>>Team 'DETECTOR' with Joao, Sascha, Charles & Panja

brainstorm ideas for an exhibit on **detectors** for a secondary school audience.

>>Team 'DARK MATTER' with Claudia , Spencer & Emma

brainstorm ideas for an exhibit on **dark matter** for a general public audience

Ideas for a future meeting >> NEUTRINOS >> ANTIMATTER

## FEEDBACK

The format was fun and productive. 1 hour was too short.

### DARK MATTER

3 ways in

- the evidence for dark matter, how it influences what we observe in the universe
- Reveal the invisible materialize dark matter in some way
- Explain current research dark matter candidates and how we look for evidence in experiments

How?

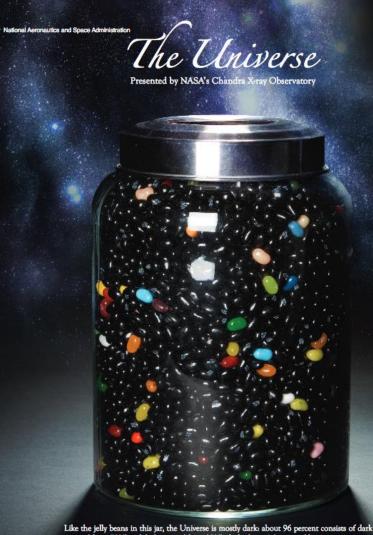
What is it?

Why is it important?

Artistic Immersive Interactive

#### INSPIRATION

Nasa's jelly bean universe.... what if this became a room?



NASA

Like the jelly beans in this jar, the Universe is mostly dark: about 96 percent consists of dark energy (about 73%) and dark matter (about 22%). Only about 4.6 percent (the same proportion as the lighter colored jelly beans) of the Universe—including the stars, planets and us—is made of familiar atomic matter. X-rays can help reveal the secrets of the darkness. X-ray astrophysics is crucial to our understanding not only of the Universe we see, but the quest to determine the physics of everything.

www.nasa.gov

#### DARK MATTER IMMERSION ROOM

A room with one tiny spot of light symbolizing what is known in the universe.... then fills with everything that is actually out there.



Yayoi Kusama



<u>Yayoi Kusama</u>





#### DARK MATTER VISITORS

The room is essentially dark, with a few stars whizzing past. As the visitor enters, matter starts to clump under their gravitational pull, as visitors distribute across the room, stars accrete and spiral arms form.

A projection with Kinect cameras

<u>ESO</u>