IPPOG EXHIBITS

WORKING GROUP -BRAINSTORM 3RD 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?

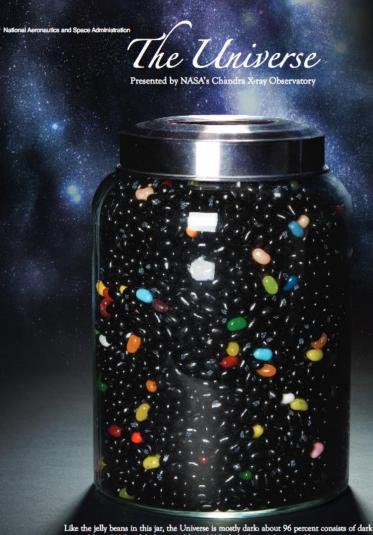
What is it?

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>