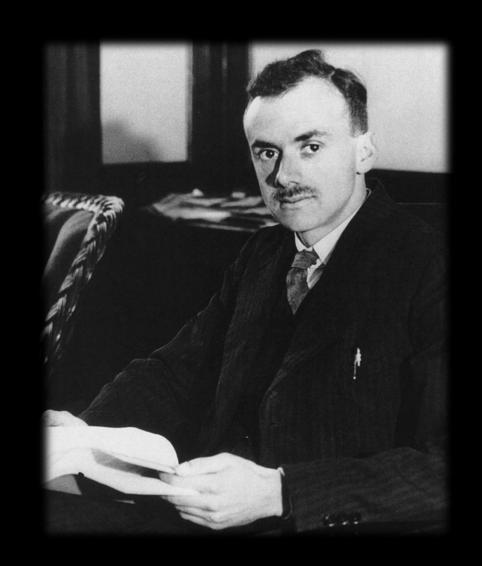


## Hidden Treasures: The case of Antimatter

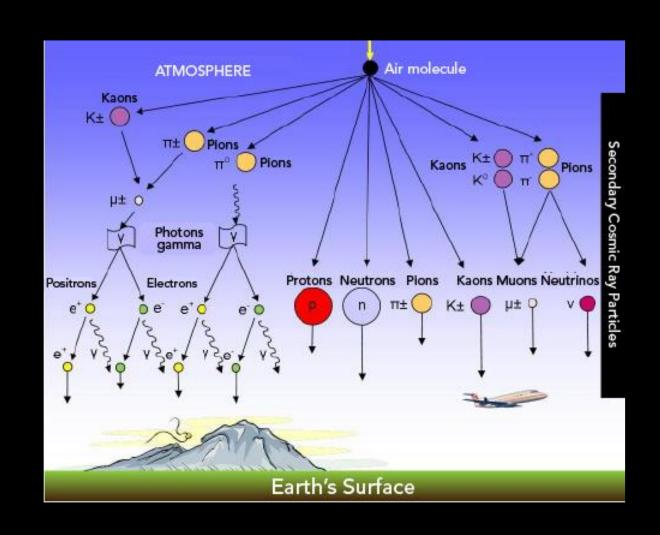
Pablo Garcia Tello,

IdeaSquare, CERN

- In the early 1900s, physicists faced a big problem: they couldn't figure out how to combine relativity with quantum mechanics.
- It was like trying to fit together two puzzles that didn't match. Then came Paul Dirac, a British physicist, who tackled the issue.
- When he worked through the math, things got messy, but he saw a possible solution in the confusion.
- The catch? His solution involved a strange idea—an unknown kind of electron with negative energy.
- No one really understood it, but the equations were so elegant that Dirac had a feeling he was on to something important.



- A few years later, scientists studying cosmic rays made a huge discovery.
- They found particles in the atmosphere that matched Dirac's prediction antimatter particles, similar to electrons but with a positive charge.
- Dirac had been right! This discovery helped merge relativity with quantum mechanics, creating a new area of physics called quantum field theory.
- Thanks to Dirac, we realized the universe has far more mysteries than we thought, including the existence of antimatter!



Dirac's story illustrates how something that a priori looks paradoxical, or implausible might hide a transformative opportunity...a hidden treasure.

We challenge your teams to generate opportunities based on "something" that a priori seems lacking them.

## Take your pick

Set 1









## Set 2









## **Exercise Rules**

- Each team will choose either "Set 1" or "Set 2" for the activity.
- Your task is to create a sales pitch for the entire set you've selected.
- The pitch must follow a consistent theme for all objects in the set, though individual items may serve different purposes within that theme.
- Your presentation should be persuasive, demonstrating real practical uses for the objects, setting a price, and providing other relevant details.
- You will have XX minutes to prepare, followed by a 10-minute presentation for each team.
- The winning team will be the one that delivers the most compelling and persuasive pitch, as judged by Luciana and Pablo.
- As a bonus, think about something "paradoxical" in your organization that could hide a hidden treasure.

Thanks a lot!

Ready, steady, go!