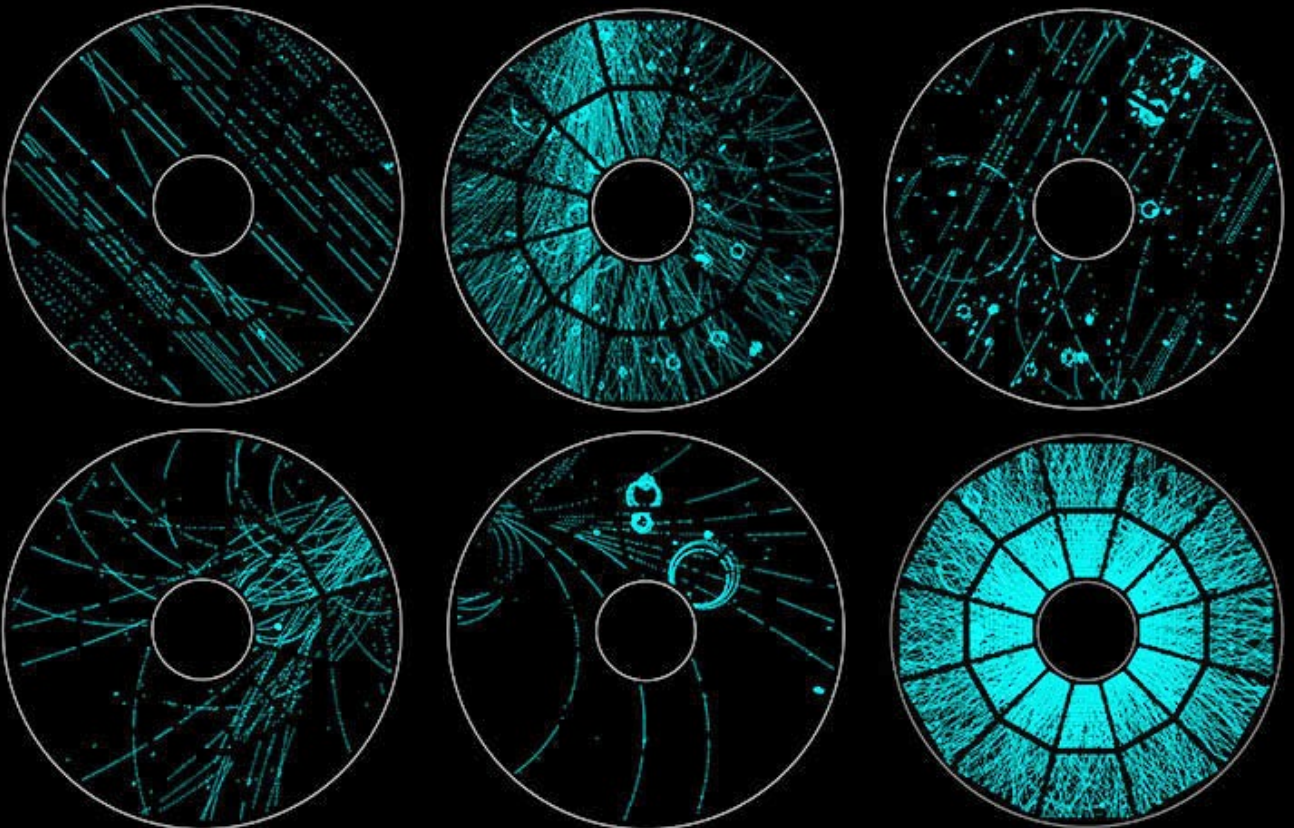


Cosmic rays

The Earth is constantly showered by particles and radiation from space. We call these cosmic rays. The particles that reach us at the surface are harmless because our atmosphere protects us.

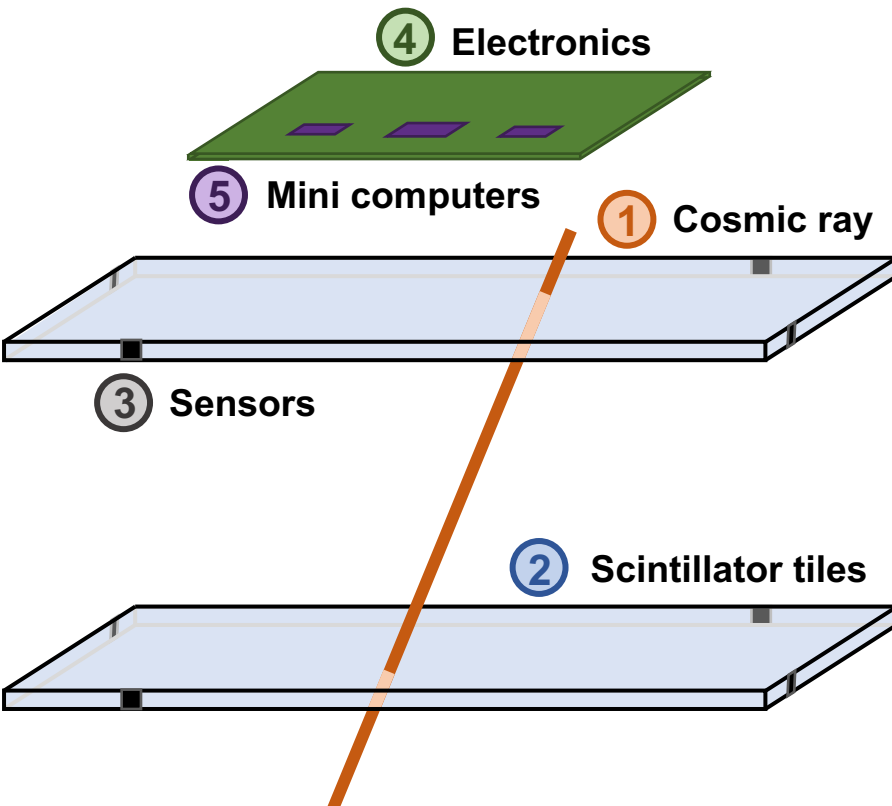
Cosmic rays can give us information about space, and the properties of different particles. They can also interfere with electronic devices and very sensitive scientific experiments, so it is important for us to detect them and understand how they work.

Watch cosmic rays pass through our detector!



How does the detector work?

- ① Harmless **cosmic rays** reach us at the surface of the Earth. Most are muons.
- ② Our detector uses two **scintillator** tiles to detect cosmic rays. These convert the energy of the cosmic ray into visible light.
- ③ The **sensors** positioned around the scintillator look at the light.
- ④ The **electronics** pass information from the sensors to a set of mini computers.



- ⑤ The larger of the **mini computers** works out the path that the cosmic ray has taken through the detector.

The other two tell the LEDs to light up along that path.