A 27-kilometre ring

Accelerator smashing speeded-up protons together!

Large Hadron Collider

LHC @Geneva, Switzerland

Colliding protons accelerated to an incredible 99.999999% the speed of light with a powerful 13.6 TeV smash

Where Protons Meet: The Collision Point

Produced many particles with the collision energy

Underground Rock

Only the elusive muons, neutrinos, and potential new particles can pass directly through bedrock to their point of collision.

Muon neutrinos from proton collisions

Tungsten target (+ emulsion detector)

Interacting within the tungsten target

Muons: Produced from neutrino interactions, standing out as our distinct signals!

Silicon tracking detectors

Observing Muons through the Silicon Detector!

Evidence of Neutrino Detection!

First-ever observation of neutrinos from a collider like the LHC!

Using the highest energy neutrinos ever created by humans, we're diving deep into the nature of neutrinos and might even test physics beyond the standard model (BSM).