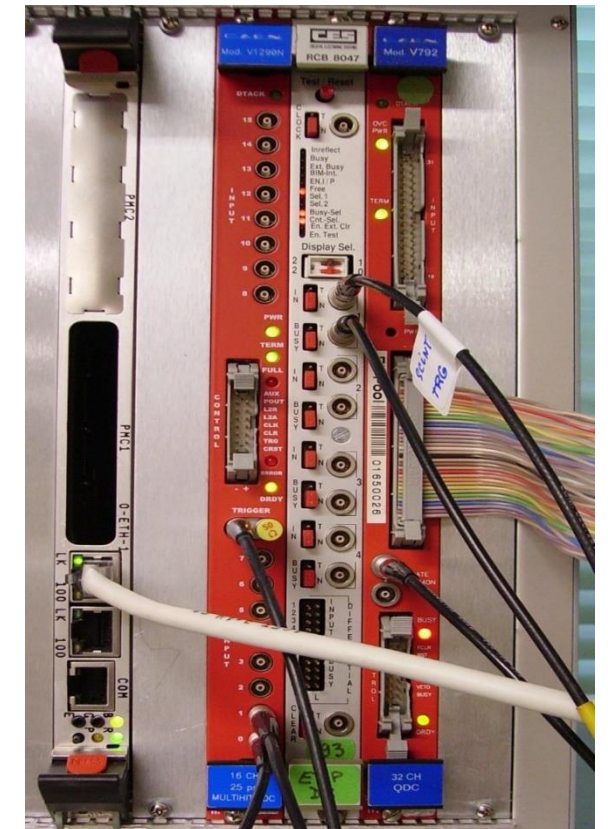
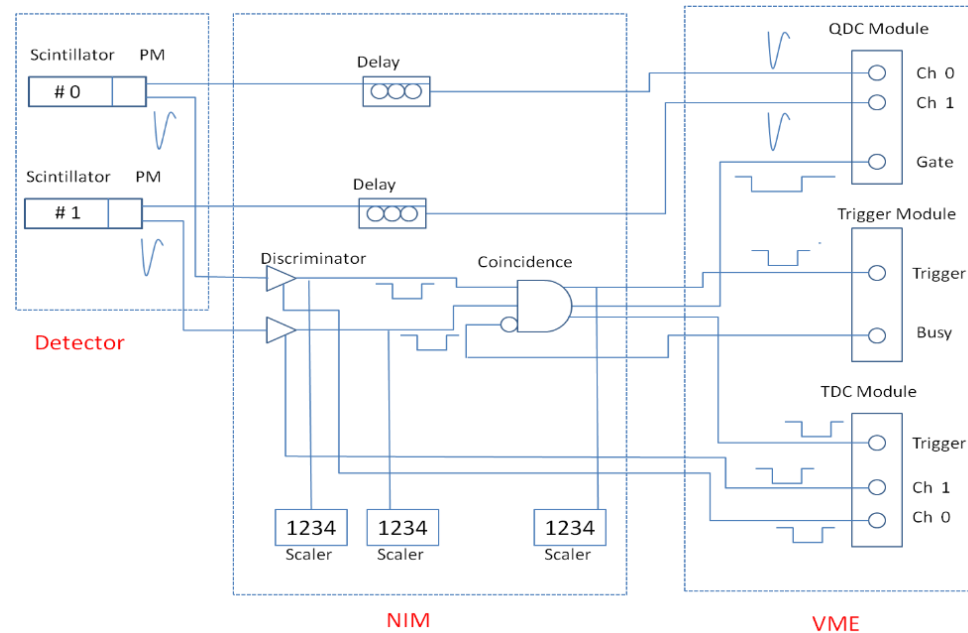
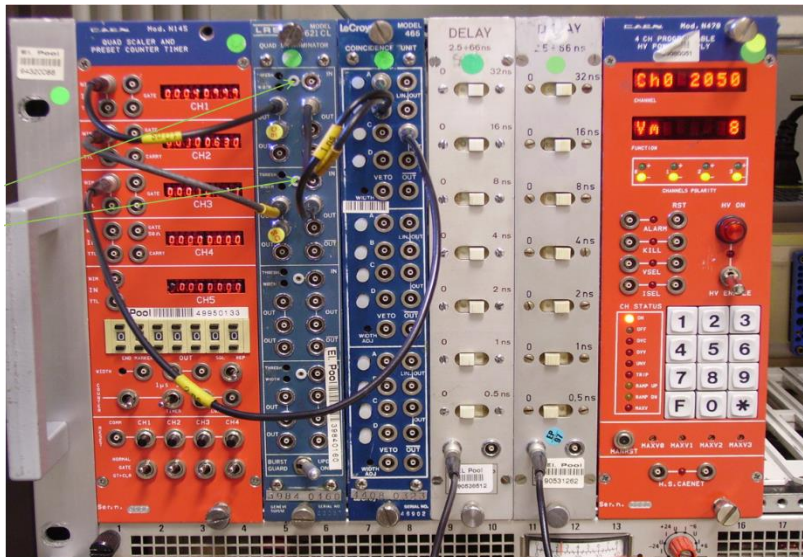
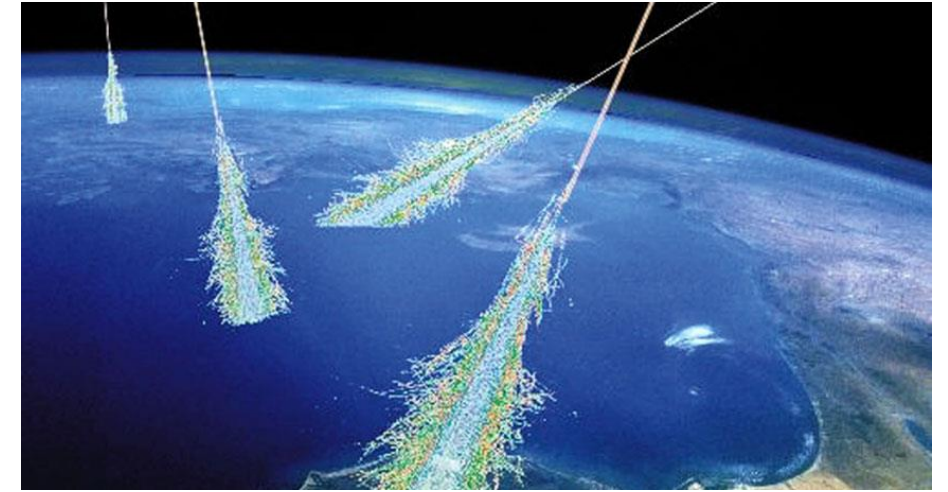
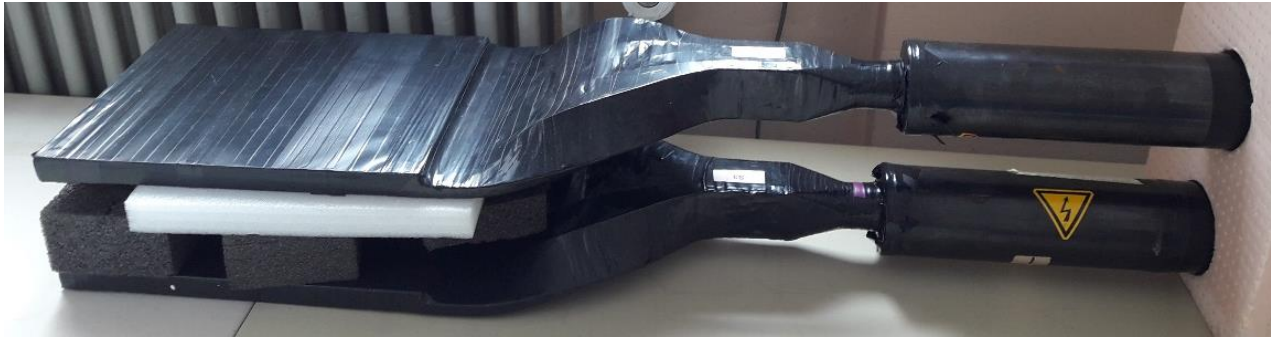


# The 2022 BL4S playground

# The 2022 BL4S playground



# Seriously.....



# What is it?

- There is a set of **detectors and electronics** modules that is very similar to what we have in the control room
  - But you can **play** with it (under my supervision)
  - Learn how the components of a **data acquisition system** work
  - Set up a **trigger**
  - Detect **cosmic muons**
  - Develop (if you have the energy) a simple **data acquisition system** yourselves
    - This includes some **C-programming** and reading technical documents
- There is also a competition and you can **win a prize**



# How is it organized?

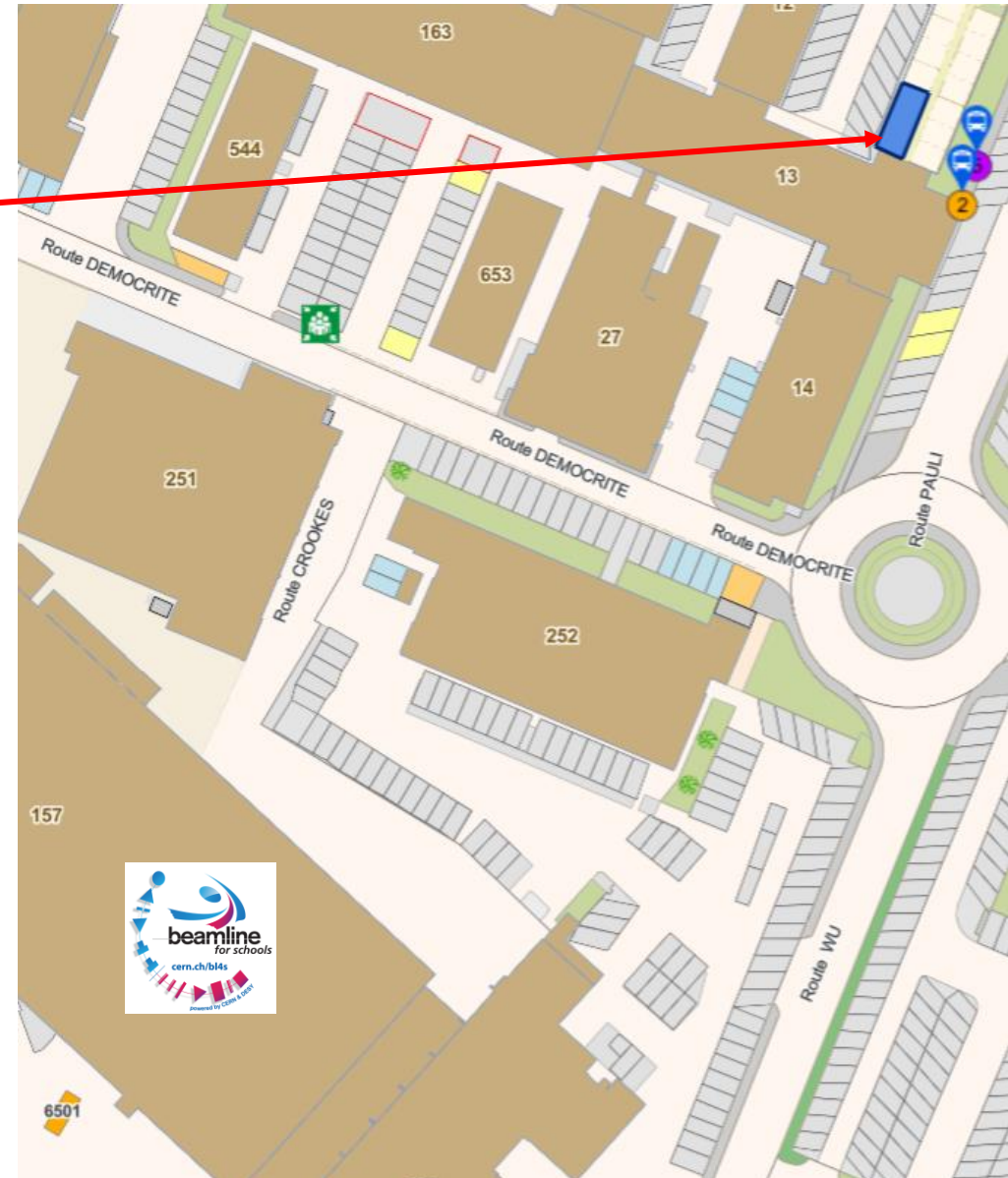
Opening hours: By appointment (contact me)

Maximum occupancy: 5 students

Location: 11-R-14

Your priorities:

1. Data taking shifts
2. Data analysis
3. Having fun (e.g. sight seeing in Geneva)
4. Coming to the playground



# It is not only a playground...



This is our 3<sup>RD</sup> MRPC. It was meant to be a spare but it does not work

We will together:

- Open and disassemble it
  - If we are lucky we will find out why it is not working
- Document details of the components used
  - It was made in 2016 and we have only incomplete documentation
- Build up a new MRPC (almost) from scratch
  - Re-use the gas enclosure, HV and gas connectors
  - New PCB, glass, resistors, capacitors, etc.
  - Assembly will be done in a clean room