

Status work for the RPC lab in Helwan

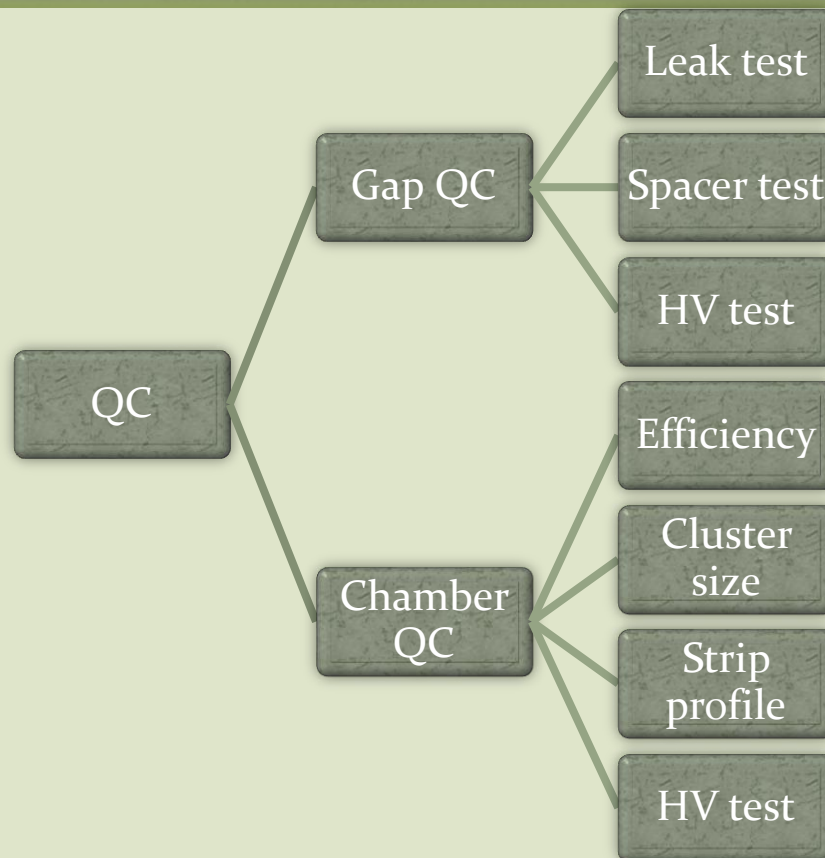
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Outlines

- Our goal.
- What we have in Helwan lab.
- What we have done .
- What we need to complete the system.
- Our plan.

Our Goal

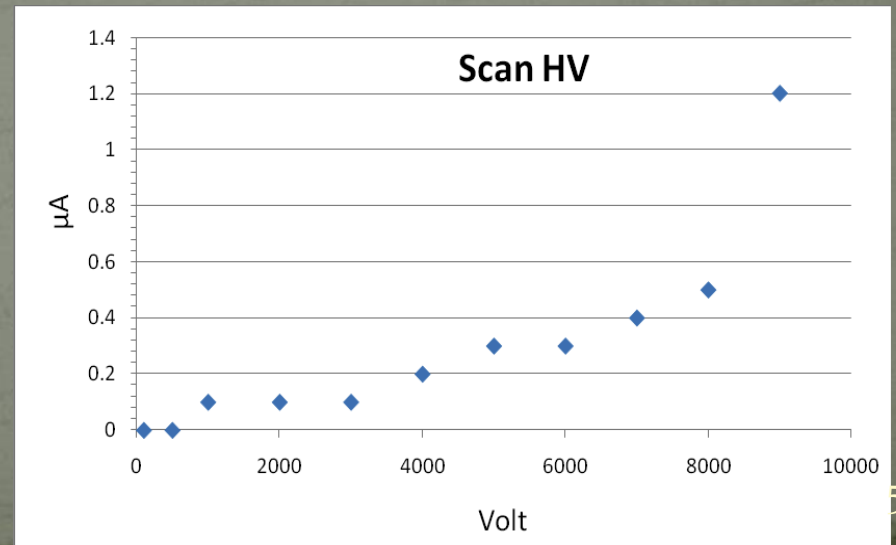
- To setup a complete cosmic stand in Helwan University laboratory, which enable us to test the RPC gaps as well as the complete RPC chamber and perform R&d on gas mixture , Bakelite.....



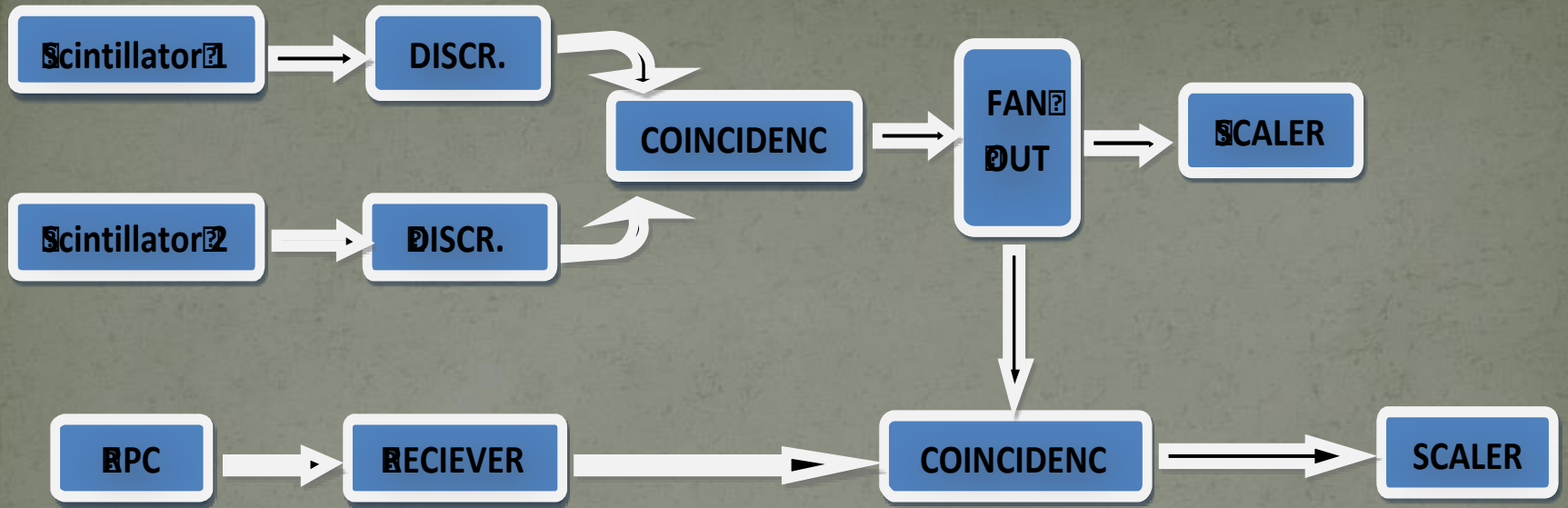
What we have in Helwan lab.

- CAEN HV power supply.
- 4 scintillators 50x50 square cm with photomultipliers.
- Oscilloscope .
- NIM crate.
- Some NIM modules (OR , coincidence, discriminator, Scalar, fan in-fan out and receiver).
- We agreed to use premixed gas.
- One complete RPC and two gaps.

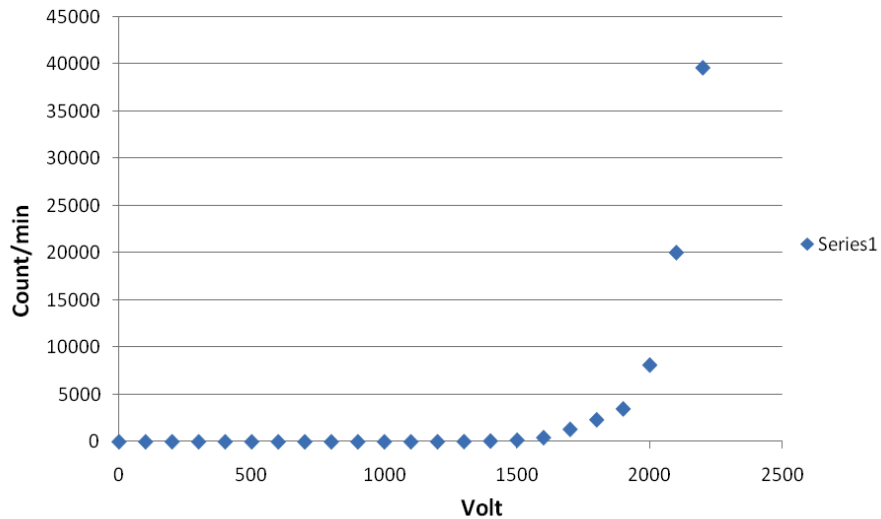
What we have done .



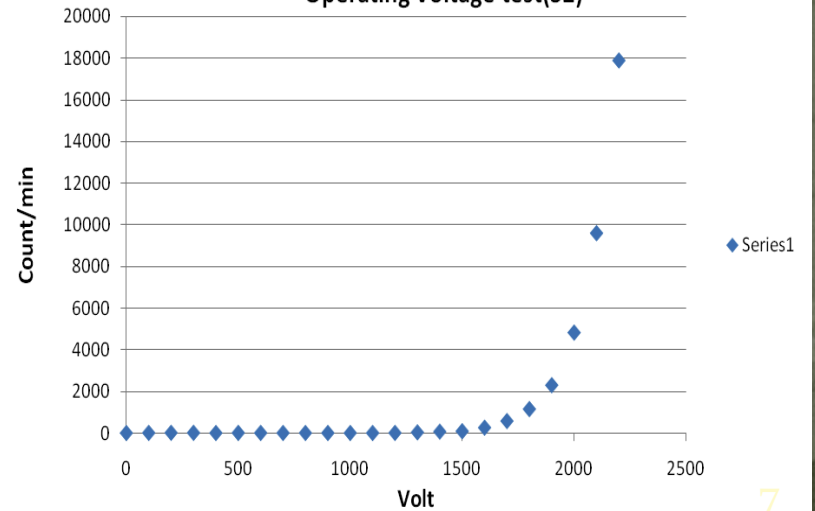




Operating Voltage test(S1)



Operating Voltage test(S2)



What we need to complete the system.

- VME crate (rent from electronic pool)
- TDC (bought)
- PCI card (bought)
- Controller (Bari)
- PC with the needed software (bought)
- NIM-ECL-NIM module (rent from electronic pool)
- Dual timer (rent from electronic pool)

Our plan.

- Set up the complete system at 904 lab (1st of Feb).
- Clone the software and run it on our pc (after add the desired modifications).
- Take some data at 904.
- Transfer the system to the GIF and test some chambers there (end of Feb).
- Finally transfer the working system to Helwan lab (by Summer).

Thank you ₉