# GEM Mock-up in 904

Saleh Muhammad National Centre for Physics QAU Islamabad

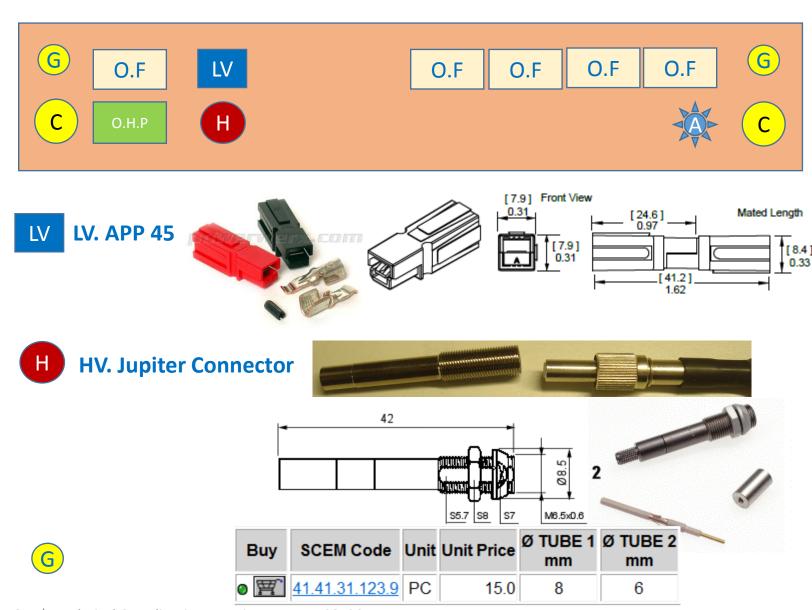
Ian Crotty
CERN

#### **Outlines**

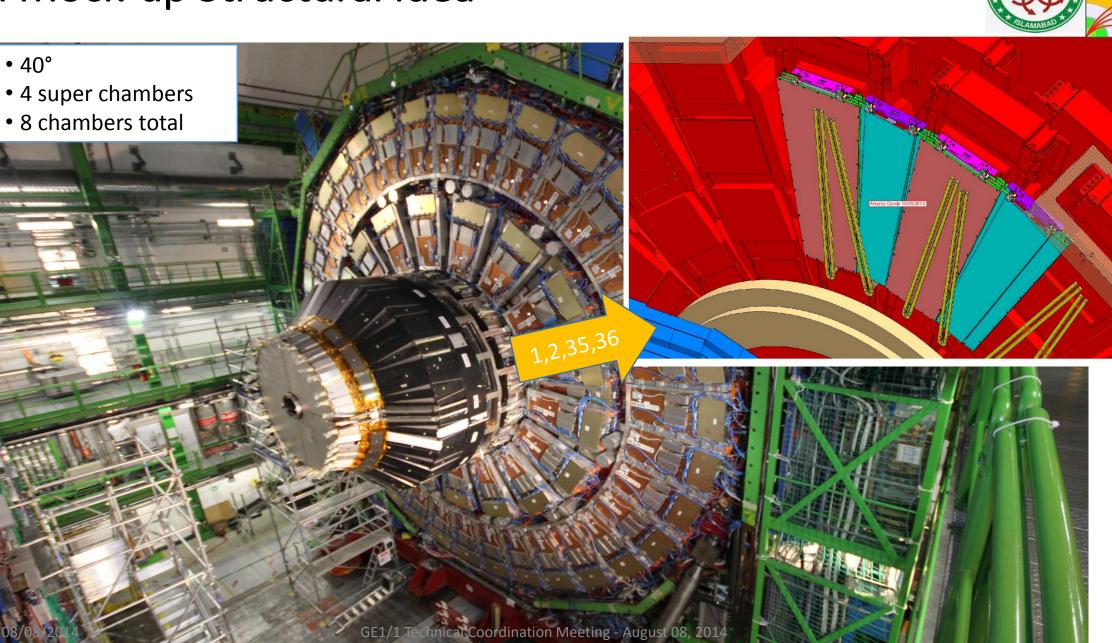
- Super Chamber Patch Panel
- GEM Mock-up structure idea
- Objectives
- Requirements in General but for preciselist we are working

#### **Patch Panel Services**

- High Voltage (Ian and Saleh)
- Low Voltage (Ian and Saleh)
- Gas (lan and Saleh)
- Coolant (Antonio, Plamen and Georgi)
- Optical readout connector (Yifan Yang)
- Alignment (Zoltan)



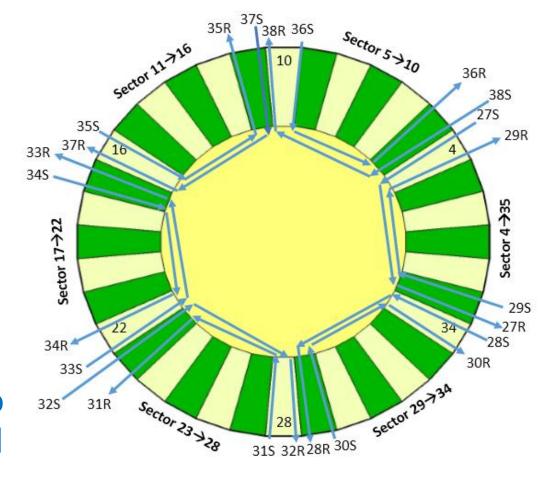
### GEM Mock-up Structural Idea



## Objectives

- Finalization of the Patch Panel
- Gas circulation studies in sector.
- Coolant prototype
- Cables and pipes routing

• For gas impedance measurement a real GEM with all stuff inside is requested to Brian, he has two GE1/1-3. He is agreed to provide at least one for this test.



## General Requirements (Precise list will be presented latter)

- 4 SCs structure (2 are available + 2 needed)
- Coolant mechanical structure for 4 SCs
- Gas and cooling lines with at the Mock-up position.
- Pipes and cable
- Connectors and unions
- Power supply for resistors
- Vertical wood station with all accessories to install the mock-up.
- Temperature and humidity sensors and their readout