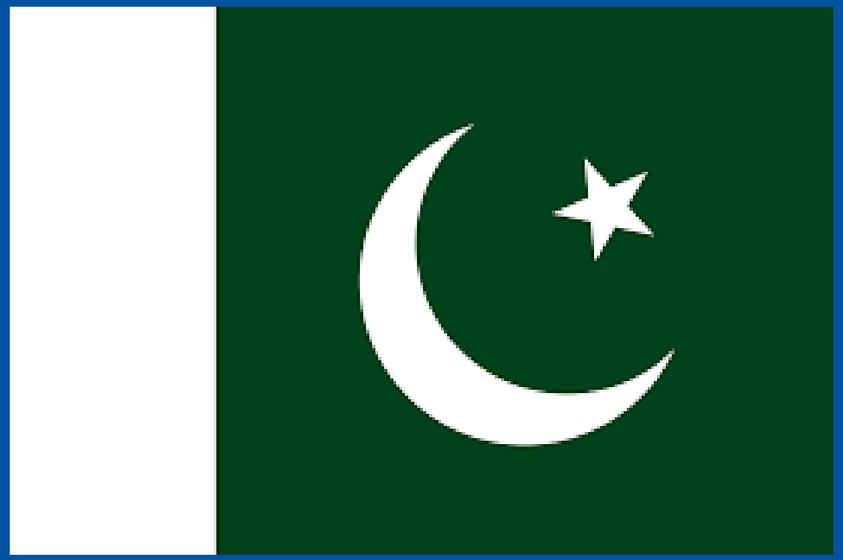
Beamline for Schools
Team Particular Perspective



Our Team Members

- Muhammad Salman Tarar (Team Leader)
- Muhammad Abdullah Masood

Supernova School

- Muhammad Zohaib Abbas
- Muhammad Asadohoo Abdali

Cadet College hasanabdal

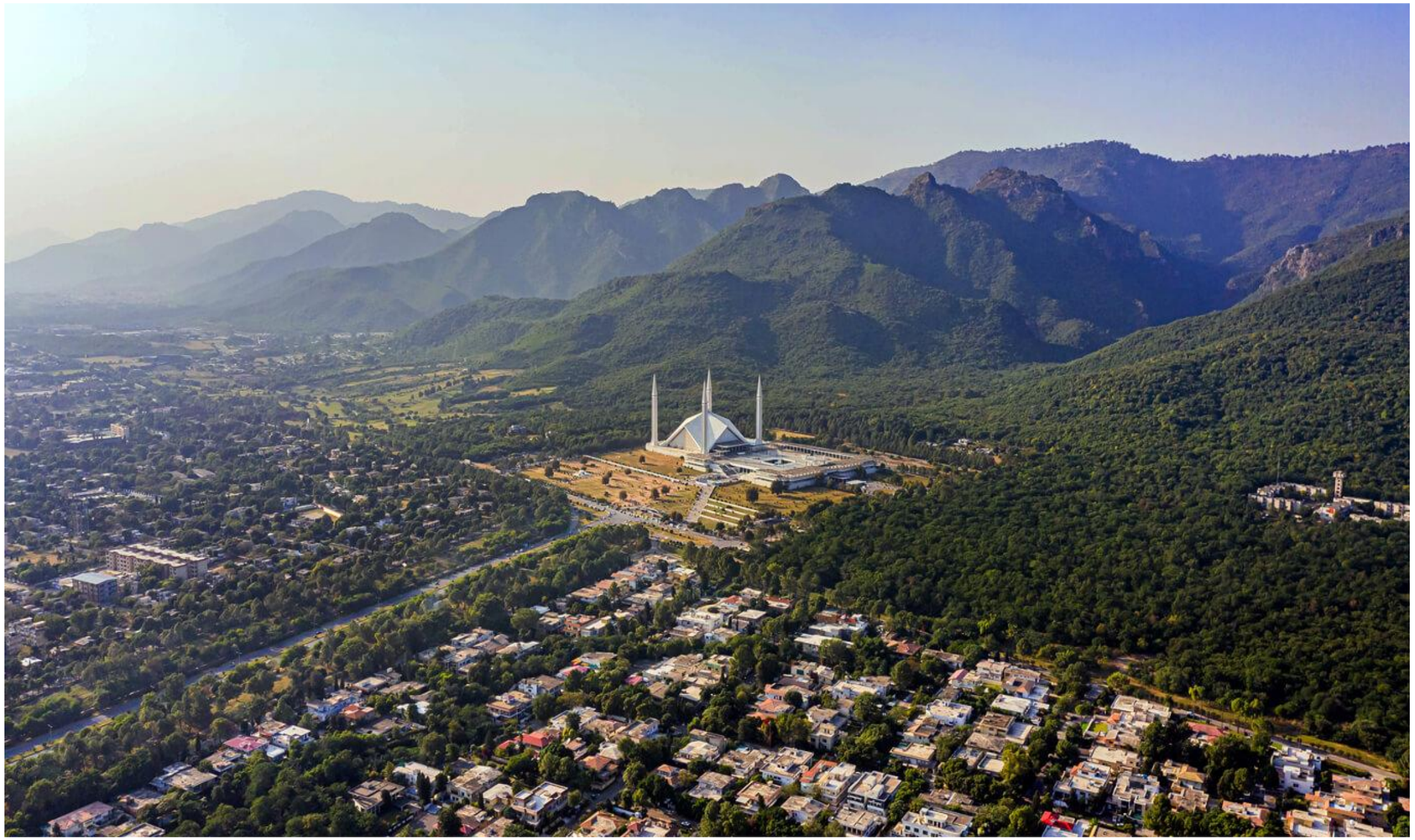
- Wasif Ahmed → Cedar College
- Muhammad Saad Bilal → Siddeeq Public School
- Mansoor Afzal
- Abdul Wahab Akram
- Muhammad Hasnain
- Sir Akhtar Tarar
- Sir Ahsan Hayat

Islamabad College For Boys

The diversity in our team is INSANE!!!

With team members coming from a number of different cities

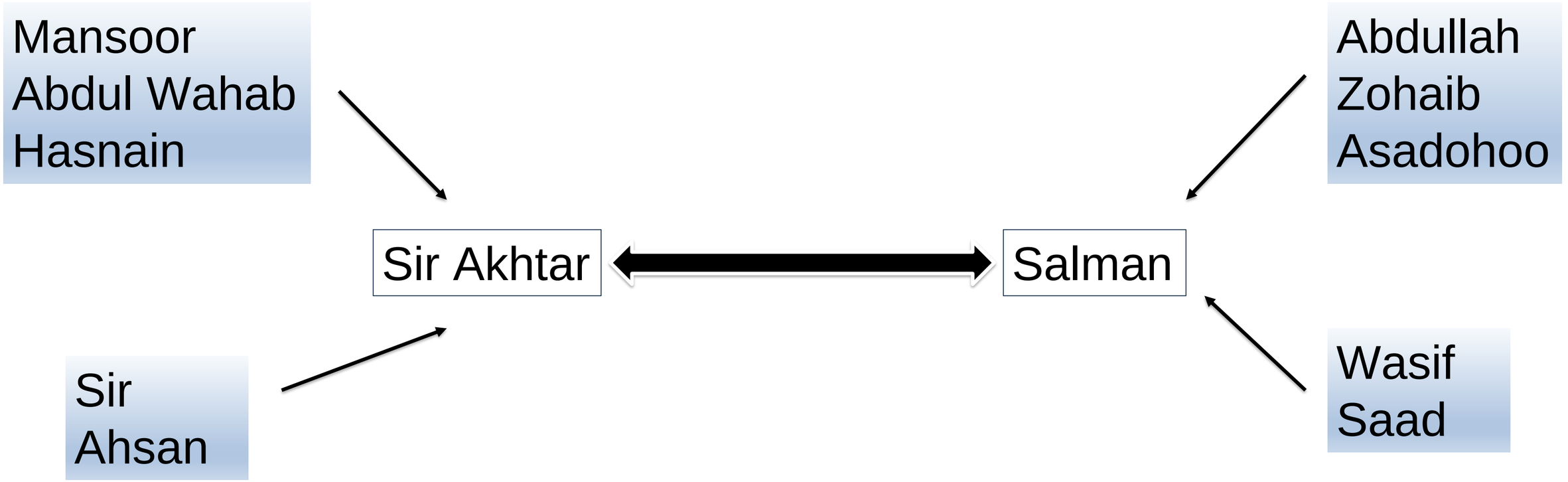
ISLAMABAD



LAHORE

KARACHI

HOW WE MET!


Mansoor
Abdul Wahab
Hasnain
Abdullah
Zohaib
Asadohoo
Sir Akhtar
Salman
Sir
Ahsan
Wasif
Saad

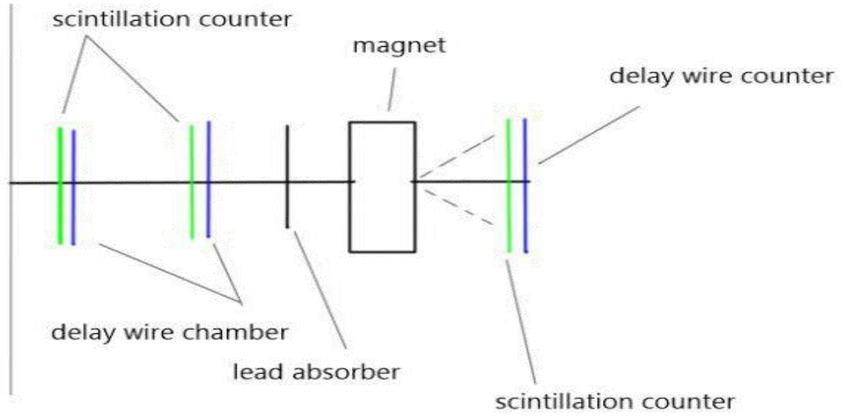
CERN
Us Getting Selected

Aim and Experimental Proposal

- Execute our experimental proposal and partnering with teams from the US and Netherlands.
- Explore use of CERN's accelerators.
- Analyze particle composition at the T10 experimental area using a proton beam.
- Assess different particle counts using appropriate detectors and setups.
- We used the scintillation counters, cherenkov detectors, delay wired chambers, and electromagnetic calorimeter.
- We devised four experimental setups.

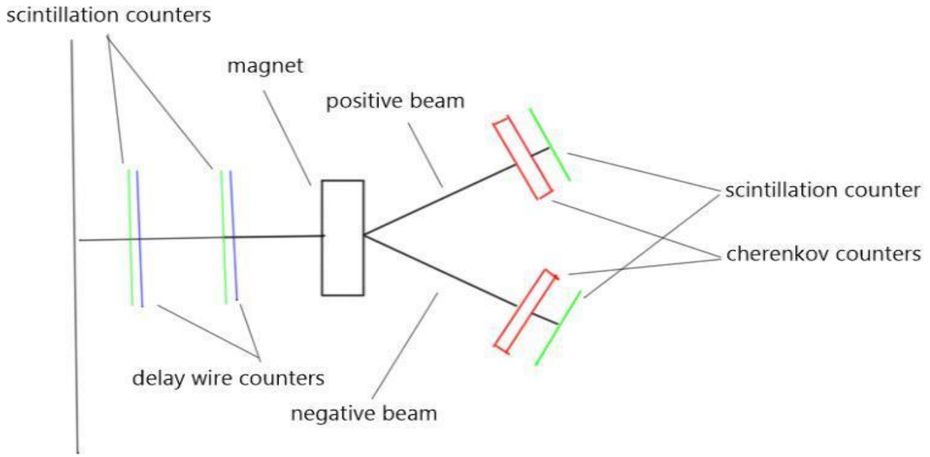
Experimental Setup 1

- In the first setup, we used the scintillation counters, delay wire chambers, lead absorber, and magnet
- This scintillation counters and delay wire chamber(DWC) will count the total number of particles



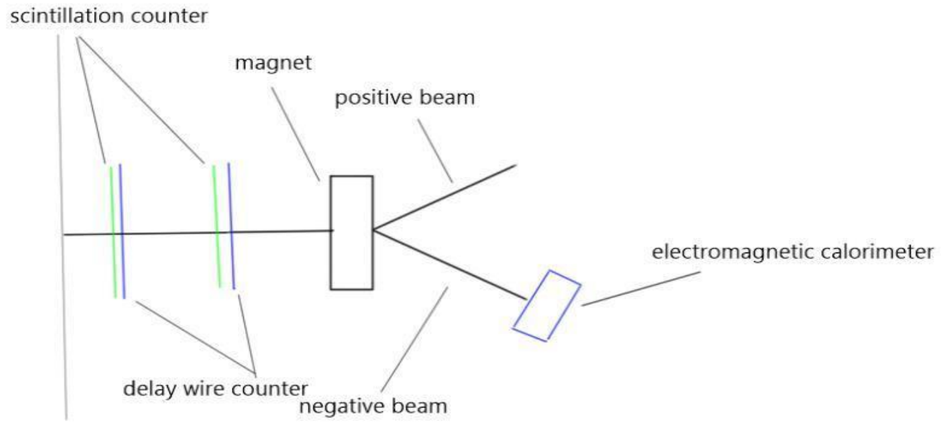
Experimental Setup 2

- In this setup, we select the positive charged beam that emerges.
- We use the cherenkov and scintillation counters to then count the positive charged particles which we expect to be proton, pions, and kaons.
- We do the same for the other secondary beam to count for the negatively charged particles.



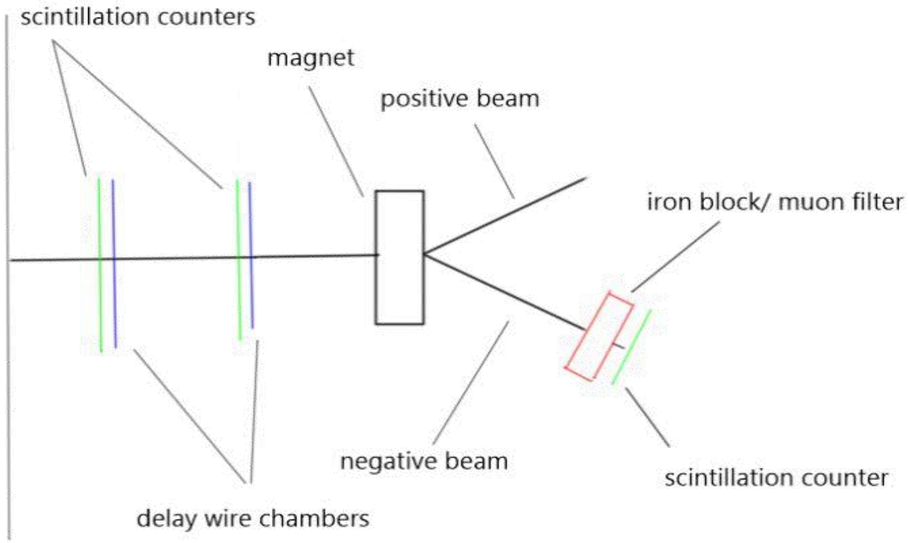
Experimental Setup 3

- In the third setup, we use an electromagnetic calorimeter for the negative beam
- We calculate the energy of the electrons
- We use the momentum of the electrons and total energy of the electrons to find the redundant count of electrons.



Experimental Setup 4

- In the last setup, we add an iron block to act as a muon filter and obtain a count for the muons.



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