Session: Mexican involvement in FCC accelerator R&D

- CONACyT support to México CERN-BEAM Program

- BUAP- Beam Detectors R&D

Arturo Fernández Téllez, BUAP

June 21, 2021

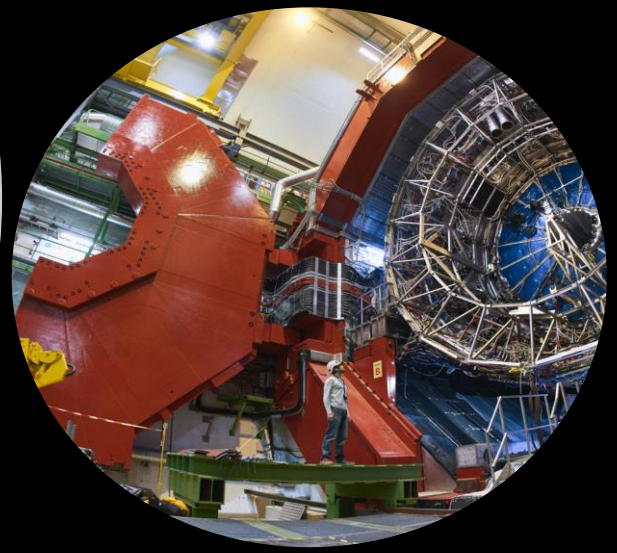
CONACyT (México Science Funding Agency)
Grants Call: Frontiers of Science 2019

Mexican Participation in High Energy Pysics at CERN

Participant Institutions:

BUAP CINVESTAV UASLP UIA U. de Gto. UAS UNISON ICN-UNAM IF-UNAM

Arturo Fernández Téllez, BUAP

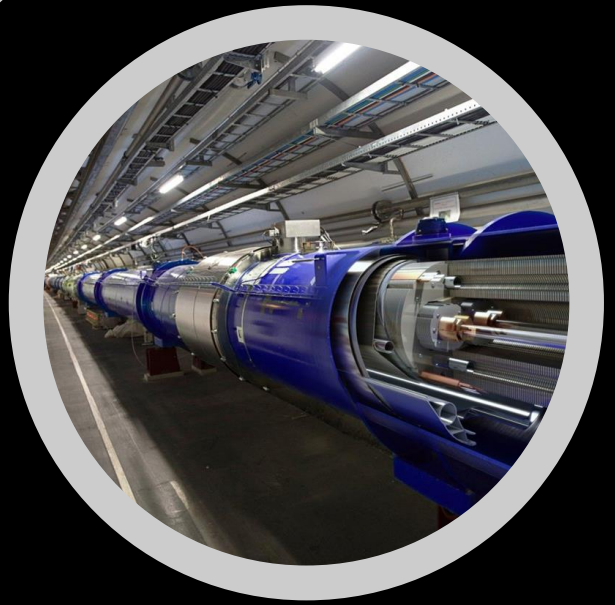


State-of-the-Art

Profund knowledge of elementary particles and fundamental forces in Nature

High Energy Physics

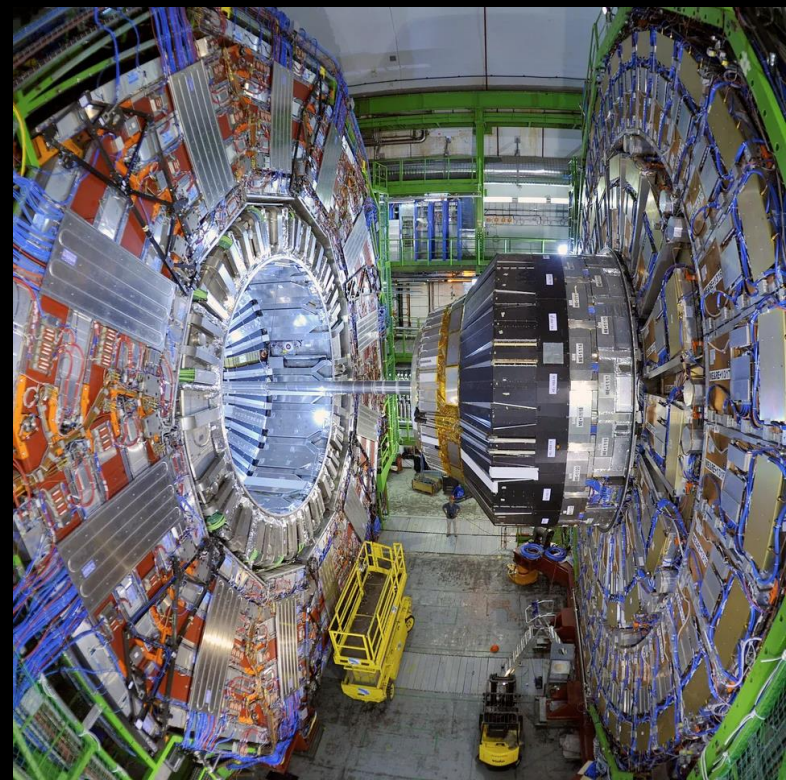
- Elementary Particles, Nuclear structure
- Accelerators, radiation detectors
- High Tech

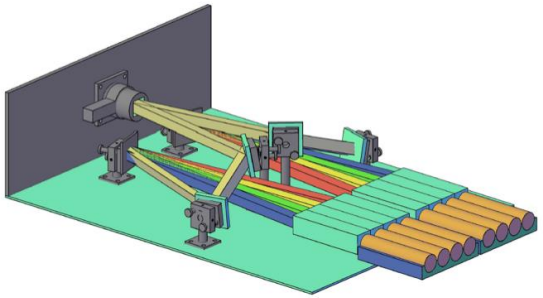


ALICE, CMS, AMS, NA62

BEAM-CERN Program

Grant duration: starting, March 2021.





The Large Angle Beamstralung Monitor (LABM), BELLE II-KEK

G. Tejeda (BUAP), P. Podesta(UAS)

- Beam monitor based in visible light produced by one beam due EM field of the other beam.
- The BUAP contribution: Electronics design and installation.
- The Mexican team contribution consist in DAQ, installation, operation, data taking and analysis.
- Installed in 2015, the data taking started in 2016 and now is under work the upgrade of the detector.