

An aerial photograph of the Texas A&M University campus, showing a grid of buildings and green spaces. In the foreground, a large, ornate, circular stone structure, likely a dome or part of a building, is visible, partially obscuring the view of the campus. The text is overlaid on the left side of the image.

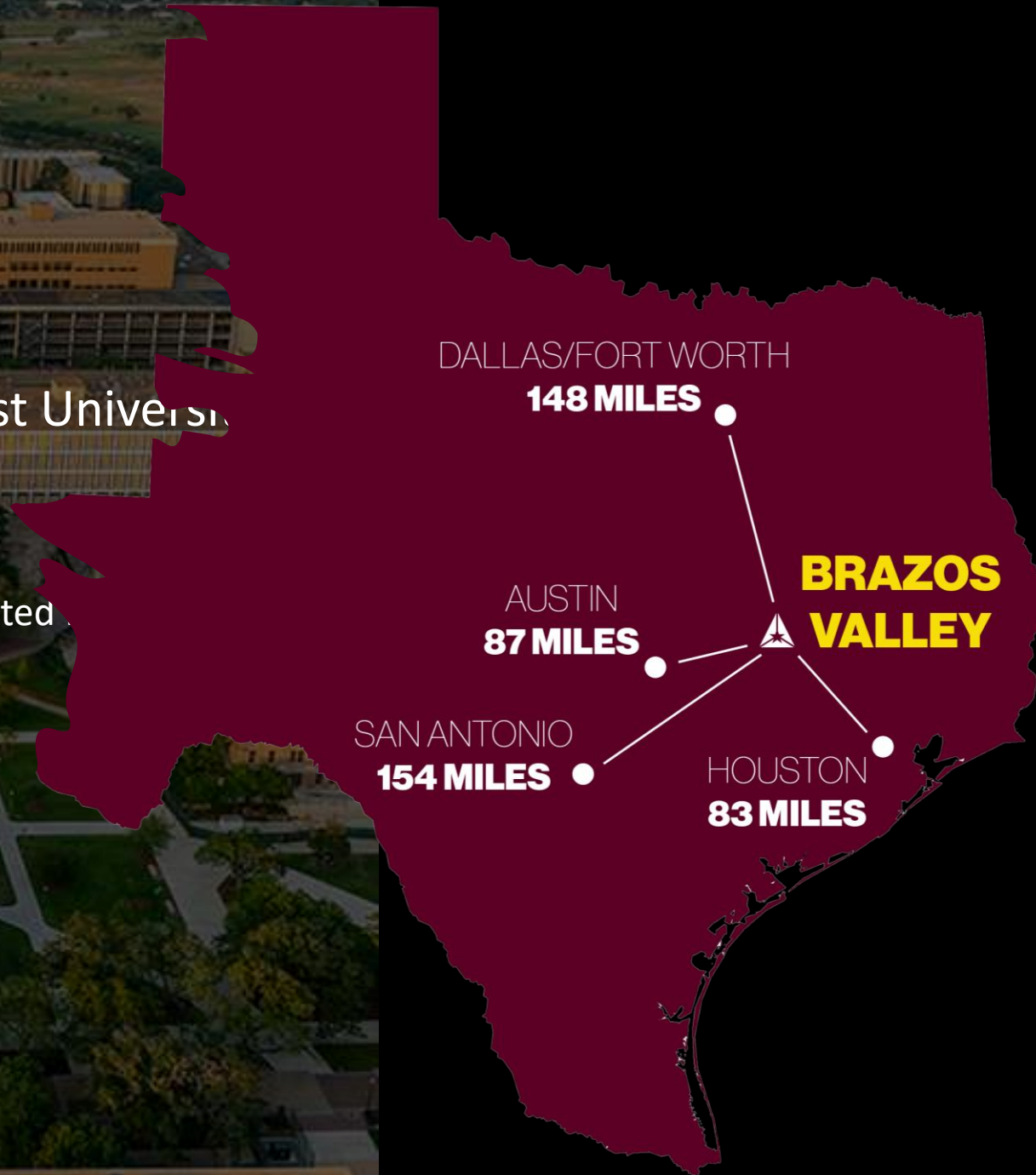
Texas A&M CMS Group Intro


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Welcome

- Texas A&M University (TAMU) is the largest University in the U.S.A.
- Main campus: College Station, TX
 - A college town with the population heavily dominated by students
 - About 90 minutes to Austin or Houston
- Physics & Astronomy Department:
 - Astronomy,
 - Atomic, Molecular and Optical Physics
 - Condensed Matter
 - HEP
 - Nuclear Physics





High Energy Physics

- HEP program's home is Mitchell Institute for Fundamental Science and Astronomy
- HEP Programs:
 - Formal theory (supergravity, strings etc.)
 - Phenomenology
 - CMS
 - SuperCDMS
 - LUX/DUNE

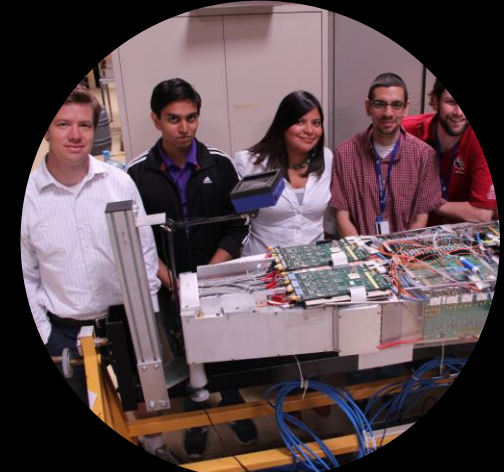
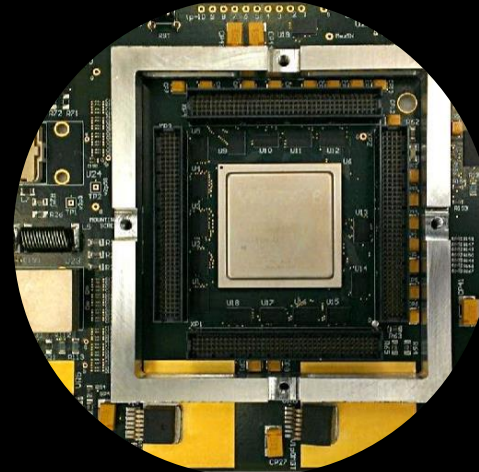
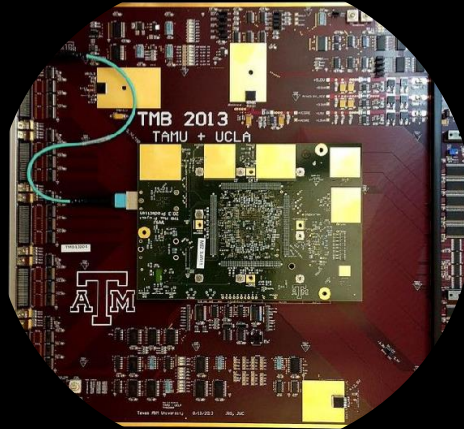
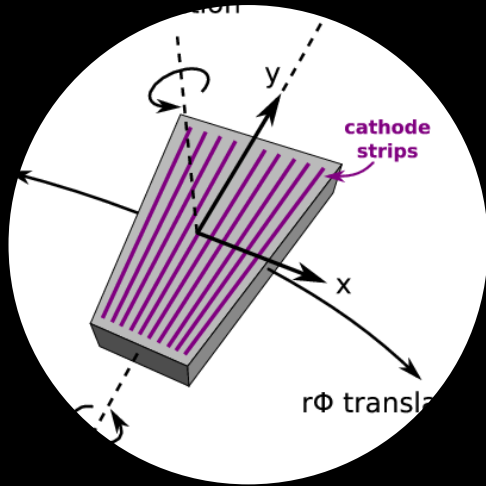
Texas A&M CMS Group

- PIs: Ricardo Eusebi, Teruki Kamon, Alexei Safonov
 - Will grow to 4 PIs by September 2024
- R&D team leads: Jason Gilmore and Evaldas Juska
- Postdocs, graduate, undergraduate students



Project	Activity	CMS Name
Muon	Doctoral Student	Huang Tao
Muon	Doctoral Student	Mueller Ryan
TK	Doctoral Student	Luo Sifu
Muon	Doctoral Student	Aebi Devin
Muon	Doctoral Student	Akhter Towsifa
Muon	Doctoral Student	Flanagan Patrick
Muon	Doctoral Student	Bolshov Artem
Muon	Engineer Electronics	Gilmore Jason
	Engineer Software	Toback David
Muon	Engineer Software	Juska Evaldas
CORE	Engineer Software	Walker Joel
OFFCOMP	Non-Doctoral Student	Lawrence Richard
OFFCOMP	Non-Doctoral Student	Ray Oishik
Muon	Non-Doctoral Student	Wetzel Cameron
OFFCOMP	Non-Doctoral Student	Ataee Langroudy Iman
Muon	Non-Doctoral Student	Korostyshevskiy Oleksandr
HC	Non-Doctoral Student	Guo Yumeng
Muon	Non-Doctoral Student	Kizilov Mykyta
Muon	Non-Doctoral Student	Samala Manu
Muon	Non-Doctoral Student	Martinez Kyla
Muon	Non-Doctoral Student	Williams Jessica Virginia
Muon	Non-Doctoral Student	Yeagle Alexander
Muon	Non-Doctoral Student	Li Xuanqi
Muon	Non-Doctoral Student	Gottlieb Shachar
Muon	Non-Doctoral Student	Ahmad Ghassan
Muon	Physicist	Bouhali Othmane
TK	Physicist	Eusebi Ricardo
Muon	Physicist	Safonov Alexei
Muon	Physicist	Kamon Teruki
OFF	Physicist	Kim Hyunyong
EC	Physicist	Malhotra Shivali
OFF	Physicist	Rathjens Denis
Muon	Physicist	Ahmad Muhammad

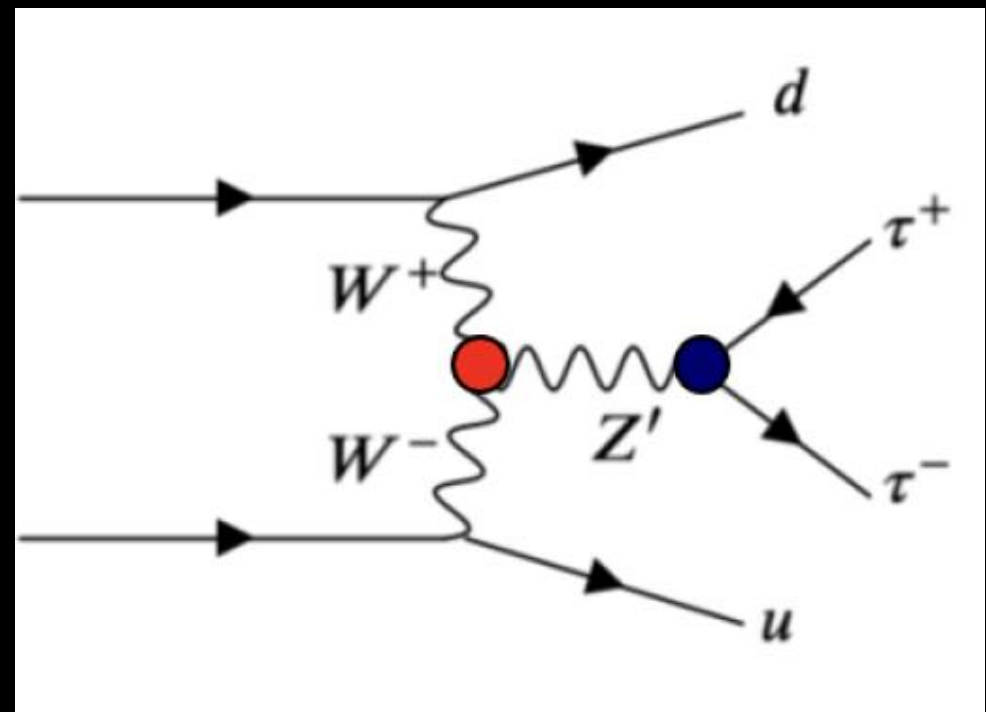
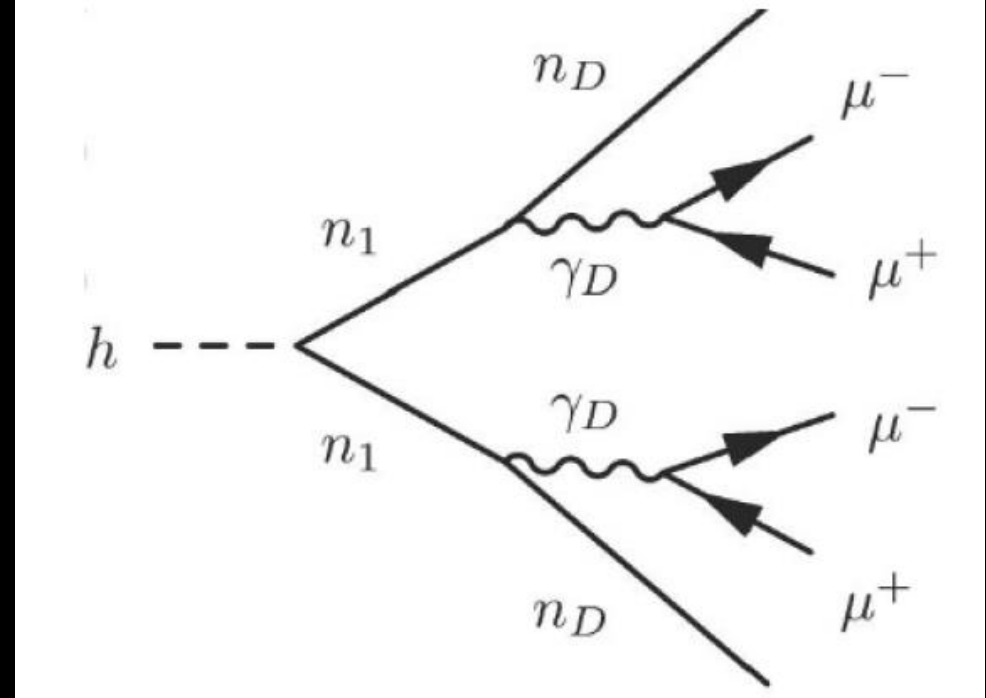
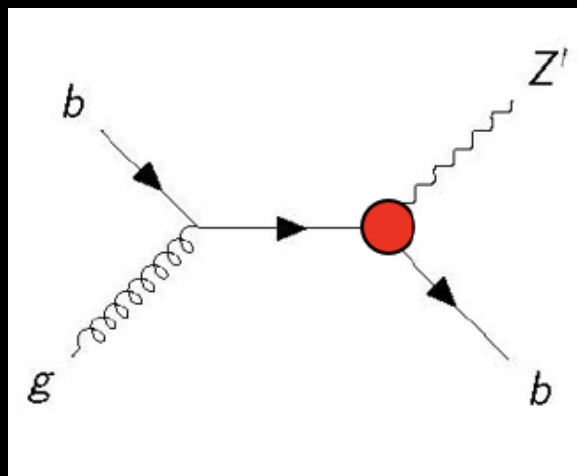
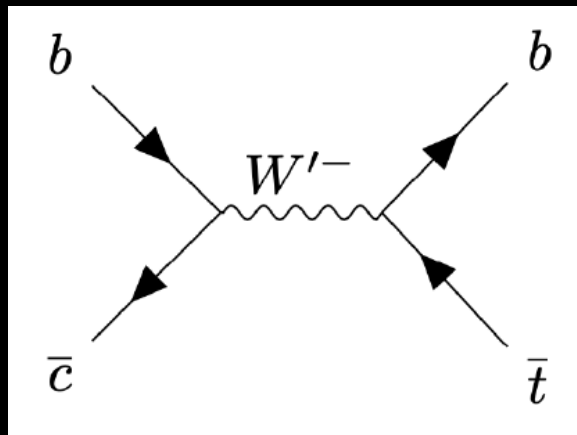
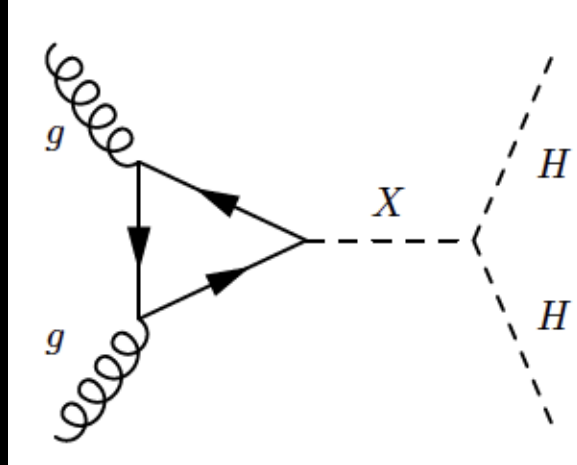
CMS Activities: Instrumentation, Upgrades and Operations



- Cathode Strip Chambers (CSC)
 - Current: Gilmore is Electronics Coordinator, Ahmad is Deputy Run Coordinator
- Gaseous Electron Multiplier (GEM)
 - Current: Juska is Deputy Electronics Coordinator
 - Past: Deputy project manager (Safonov), DPG Coordinator (Kamon)
- Muon alignment – TAMU's solo responsibility
 - Kim – Muon alignment coordinator
- In-house electronics lab at Texas A&M – building electronics for CMS
 - CSC Optical Trigger Motherboards (OTMB) - 2014, 2-019 and -2025
 - GEM Optohybrids boards
 - CSC and GEM HL-LHC Backend Systems

CMS Physics

New physics in Higgs sector, Z-prime, W-prime, searches for dark sectors in multi-muon decays



New Assistant Research Scientist Position

- A career type position, i.e. intended as a long-term job
 - No time caps, eventual promotion to Associate Research Scientist and Full Research Scientist;
 - Initiated with the seed funding covering 5-7 years, long term support from a combination of funds of the CMS group at TAMU
 - Formally reports to the PI/Team leader (Safonov)
- Job description: we expect this person to engage primarily in physics analysis tasks; collaborate with and provide guidance to students and postdocs; work with the PIs on developing group's planning in physics realm; service tasks at the level required for authorship – details to be discussed; other options could be negotiable at the time of hire or as we go
- Location: we prefer this position to be posted in Texas, but this could be negotiable