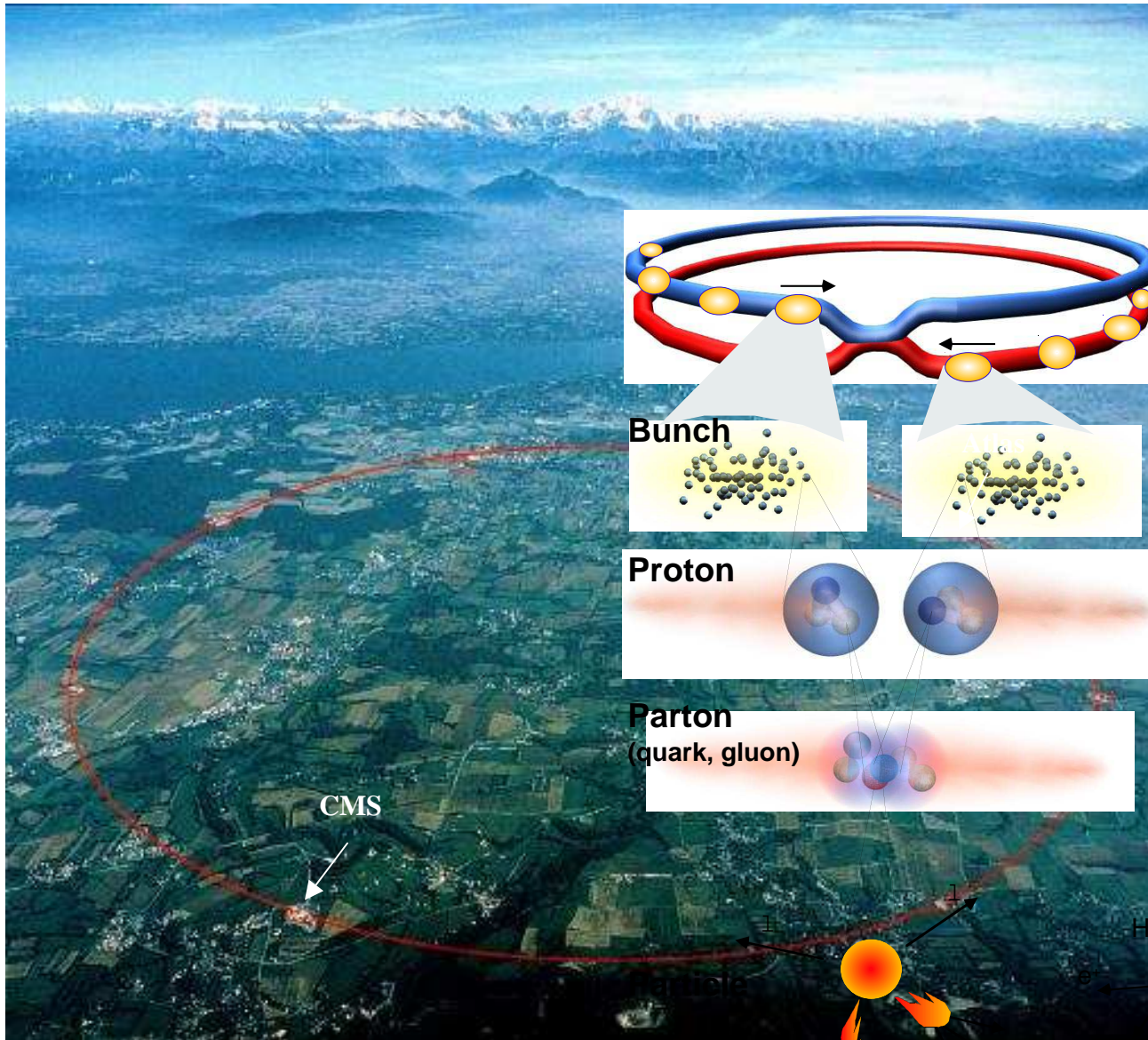
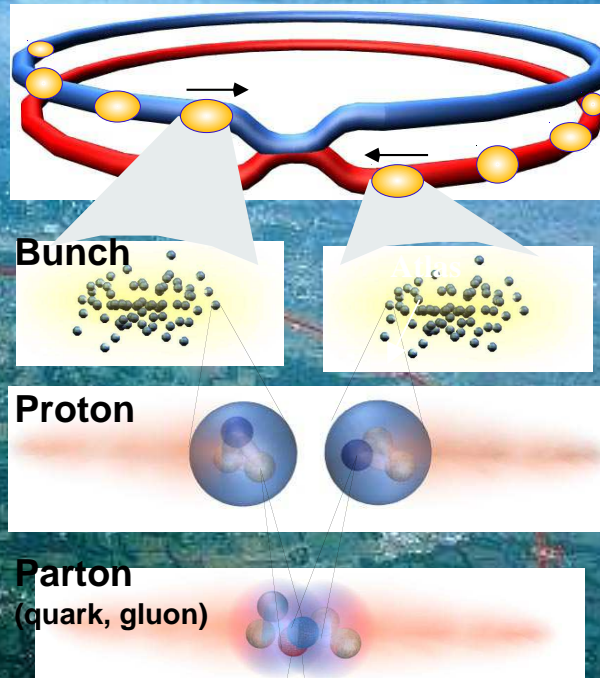


The Large Hadron Collider

27 Km Circumference
50-150m depth
~ 7000 superconducting magnets (8T)

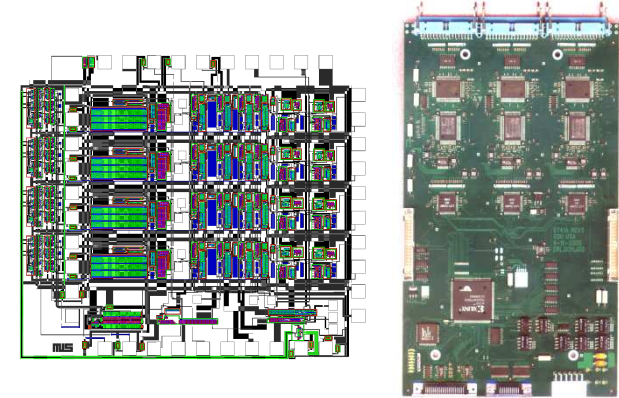
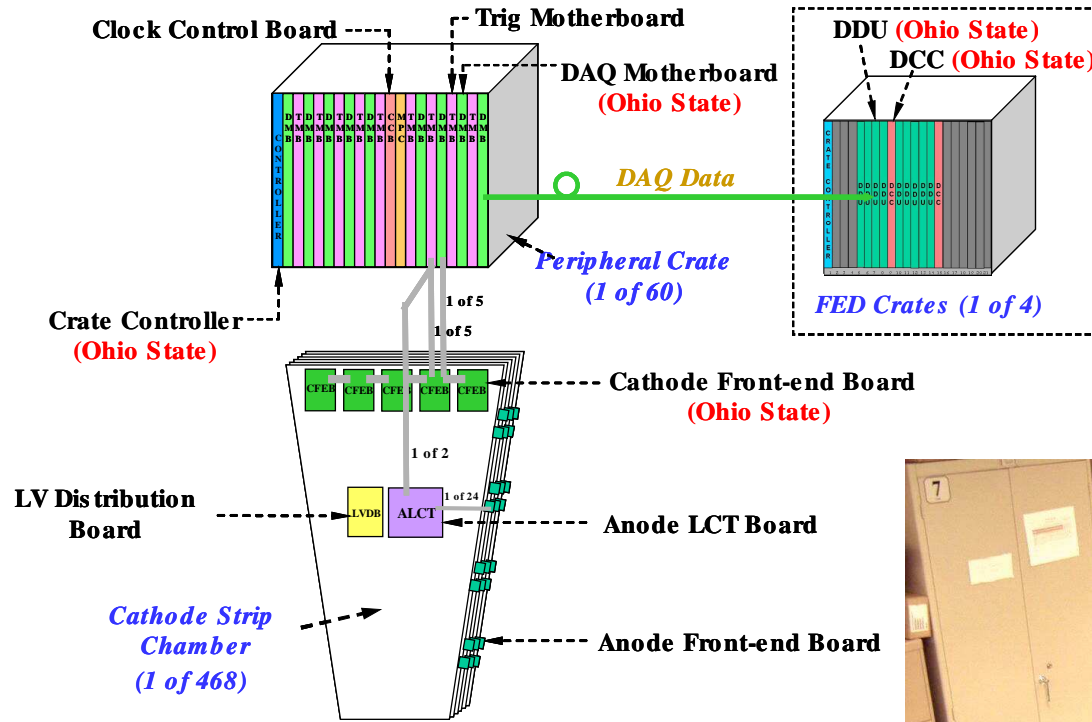
| | |
|----------------------|--------------------------------------------|
| Proton-Proton | (2835 x 2835 bunches) |
| Protons/bunch | 10^{11} |
| Beam energy | 7 TeV (7×10^{12} eV) |
| Luminosity | 10^{34} cm ⁻² s ⁻¹ |
| Crossing rate | 40 MHz |
| Collisions \approx | $10^7 - 10^9$ Hz |



SUSY.....



OSU CMS Contribution to CSC System



~ \$ 7 million R&D+Construction

2600 CFEB Boards

550 DMB Boards

70 OSUCC Boards

50 DDU Boards

10 DCC Boards

Cables + control computers, ...

