



# CBI Kick off week Fall 2013 Idealab@CERN

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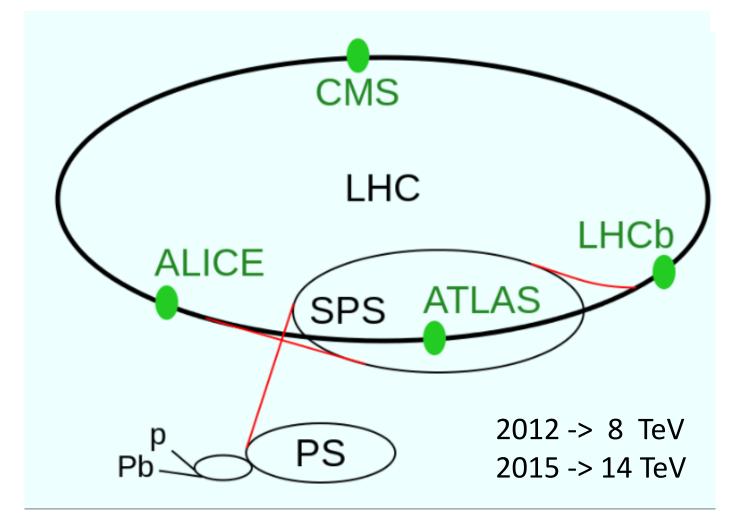
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## Large Hadron Collider (LHC)

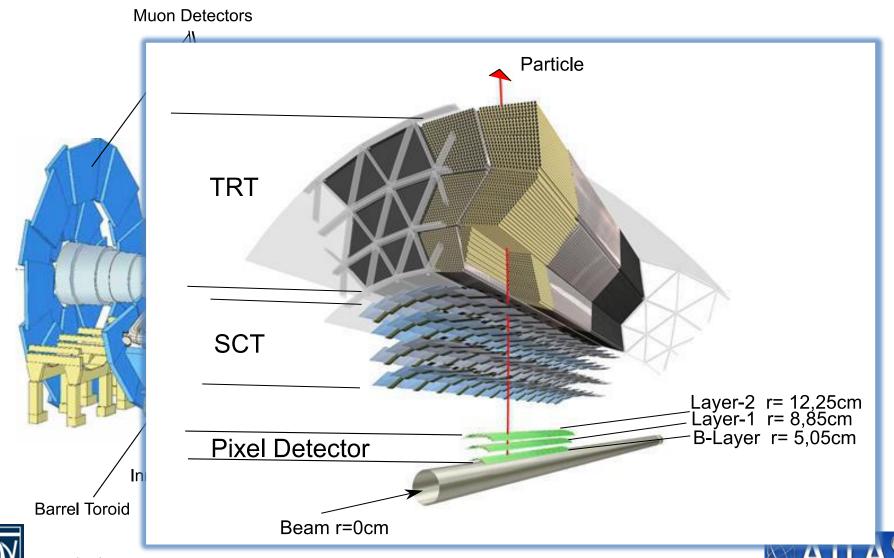






### **ATLAS Detector & Sub detectors**







## Insertable B-Layer (IBL)

TALENT researchers are enrolled with the IBL project (DQ, cooling, detectors..)

### **Development and Application of Silicon Pixel Detectors**

- 3.2 cm -> more particle flux
- 8 TeV -> 14 TeV



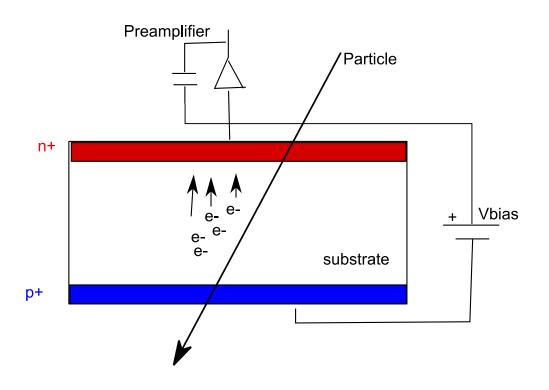
Hardness radiation Sensors Technologies (Planar, 3D sensor)







## How a Semiconductor Detector works



#### IONIZATION









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