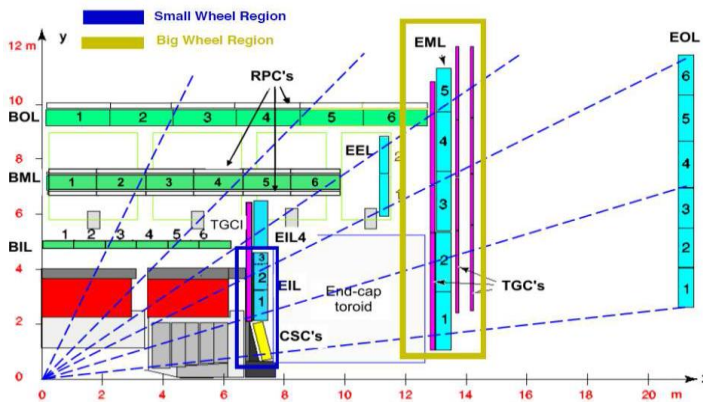


Electronics Design and Layout Complexity of the ATLAS New Small Wheels

Sahal Yacoob, the ATLAS Muon collaboration

- In the future The LHC will provide ATLAS with 14 TeV collisions and 140-200 interactions per crossing
- In the forward region of the small wheels the increased luminosity and energy amounts to decreased tracking performance and trigger efficiencies with the old small wheel .
- To avoid degraded tracking performance and trigger efficiencies the NSW provides an upgraded set of precision tracking and trigger detectors which operate at high rates with vastly improved real-time spatial resolution (< 1 mrad angular resolution) using sTGC's and MicroMegas
- The poster describes the current status of the electronics design for the new small wheel detector of ATLAS



The Small Wheel

NSW Electronics Trigger & DAQ dataflow

