

FPGA-based fast track finding



- ATLAS tracker being replaced for HL-LHC; want to make best use of this for track information in the upgraded trigger system
- One approach being explored is to run a Hough Transform on FPGAs
- The system requirements can be shrunk by filtering hit clusters before, and removing fake tracks candidates afterwards, both on FPGAs
- Explored cluster filtering using "stubs" (pairs of hits in back-to-back strip modules)
- Fake removal using NNs
- For performance of these methods, see the poster :-)

