

Outer tracker front-ends

Need to ship hits off detector

Ship all hits @ 40 MHz? No

- Bandwidth needed: off by 1 order of magnitude (order of 10 Gbps per module)
- Track reconstruction ~ impossible

Solution: ship only high- p_T hits (stubs)

- Threshold of ~ 2 GeV
- Data reduction of one order of magnitude or more

Modules with p_T discrimination (“ p_T modules”)

