

# SVN commits

- Constantinos architecture committed
  - A lot of changes!
  - But should be backward-compatible
  - Last bugfix committed ~1 hour ago
  - In principle, it is ready for general use
    - In practice, only I have the banks
- Requiring a hit in b-layer no longer hardcoded:
  - REQUIRE\_FIRST template variable

# Results for CM arch

- 8L allows 1 missing plane + does usual recovery if 8/8 fails chi2
  - Chi2 unoptimized: using the one from 11L
- 4L also allows 1 missing plane (not SCTtrk)
  - In total, final 11L can have two missing planes
    - One in pixels, one in SCT
- In all cases, central-only banks!
- A complicated table below summarizes # fits and efficiencies for WH @  $10^{34}$  for default, SS-shifted, and CM architectures

Best case to date

	Default large	SS_large_bank	Default small	CM (HW8=0)	CM (HW8=1)	comments
<b>11L bank</b>						
SS	50x64x144	50x64x144	50x64x144			
# central <u>patt/reg</u>	32M	32Mx2	10M			
<b>8L bank</b>						
SS				SS=32 strips	SS=32 strips	
# central <u>patt/reg</u>				1.7M	1.7M	
<b>4L bank</b>						
SS				Phi=25, eta=36	Phi=25, eta=36	+ <u>SCT</u> trk split
# central <u>patt/reg</u>				0.5M	0.5M	
<b>WH @ 10<sup>34</sup> performance (200 events, # fits is for the <u>worst</u> region - #1)</b>						
Primary <u>trk eff</u>	<b>75.9%</b>	<b>74.9%</b>	<b>72.0%</b>	<b>77.9%</b>	<b>74.4%</b>	
Muon <u>eff</u>	<b>88.1%</b>	<b>87.1%</b>	<b>82.2%</b>	<b>90.0%</b>	<b>89.6%</b>	+8L fits:
# fits (total)	<b>10.6M</b>	<b>1.8M</b>	<b>950k</b>	<b>57k</b>	<b>8k</b>	<b>+38k</b>
# 11/11 fits	1M	180k	440k	400	290	+5k
# 10/11 fits ( <u>rds</u> )				53k	5k	+4k
# 10/11 fits ( <u>rec</u> )	9.6M	1.6M	510k	4k	3k	+29k

# fits in 4L/11L (second stage)

# fits in 8L (first stage)