

Scintillator timing studies

Paul's plots

- ABC Track selection:
 - MuoTrfit block
 - charge $\neq 0$
 - # BC scint hits > 0
- A stub selection
 - MuoTrfit block
 - charge = 0
- Red plots: add'l requirement: # A wirehits > 3

http://www-d0.fnal.gov/~balm/muon/scint_times

Scintillator timing studies

Andrew's plots

- Selection
 - based on MuoTrfit block
 - require A and BC scintillator
 - >2 A-lyr wirehits, >1 BC-lyr wirehits
- (non-)Isolation:
 - $\Delta R(\eta, \varphi) < 0.5$ (non-: > 0.5)
 - relative to RunII 0.5 cone jet (JCCB)

Efficiency etc.

- Propose cut: $-5 < \text{time} < 10$
- Signal efficiency
 - Paul's ABC-tracks: 90% (ctr:91%, fwd:90%)
 - Andrew's isolated tracks: 95%
- Background rejection
 - scale signal to fit peak in non-isolated sample and subtract -> what's left is background
 - 1697 total bkg-trks, ~700 bkg-trks in "gate"
 - cut gets rid of 59% of background
- www-d0.fnal.gov/~balm/muon/scint_times/