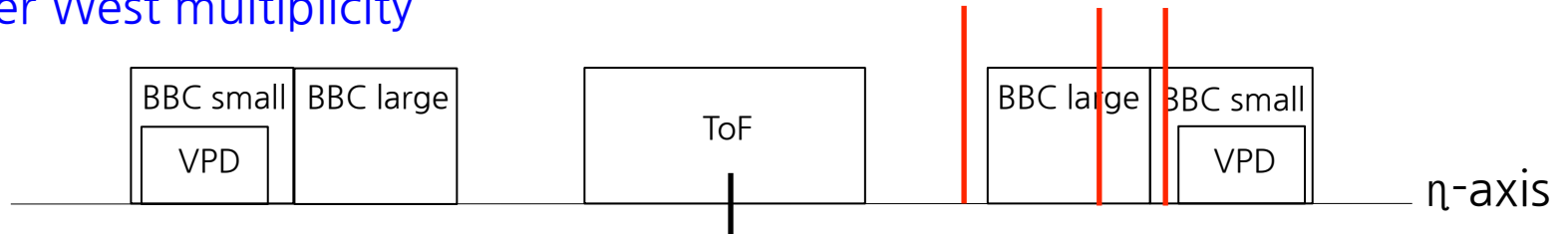


# Searching for an event condition for the $A_N$ dependence study

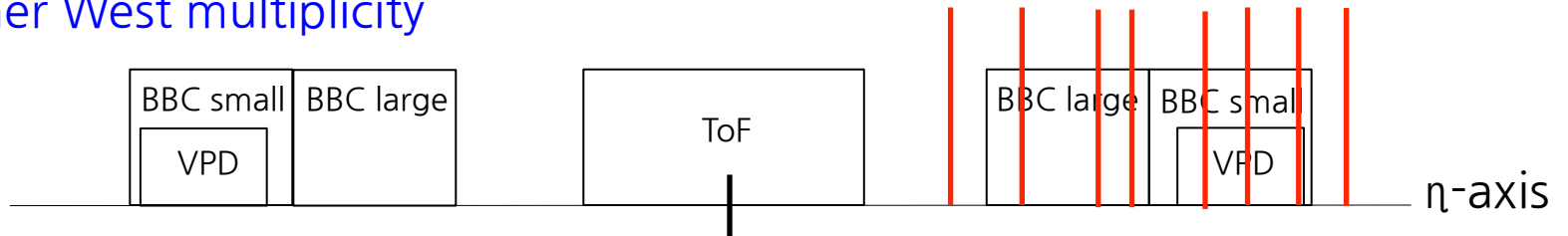
13 Mar. 2019  
Minho Kim

# West multiplicity

## Lower West multiplicity

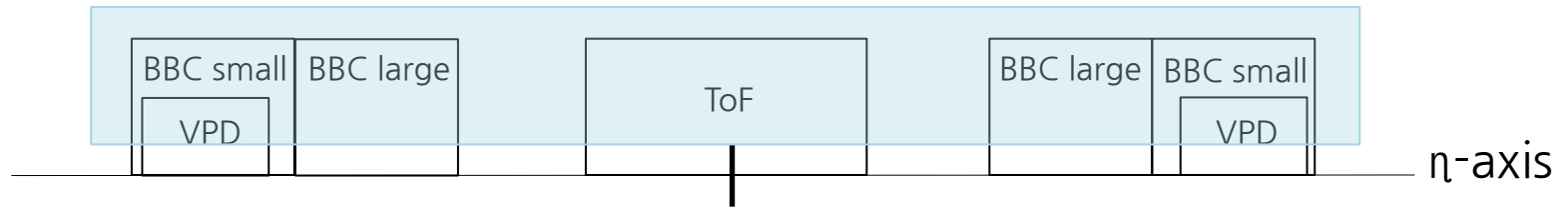


## Higher West multiplicity



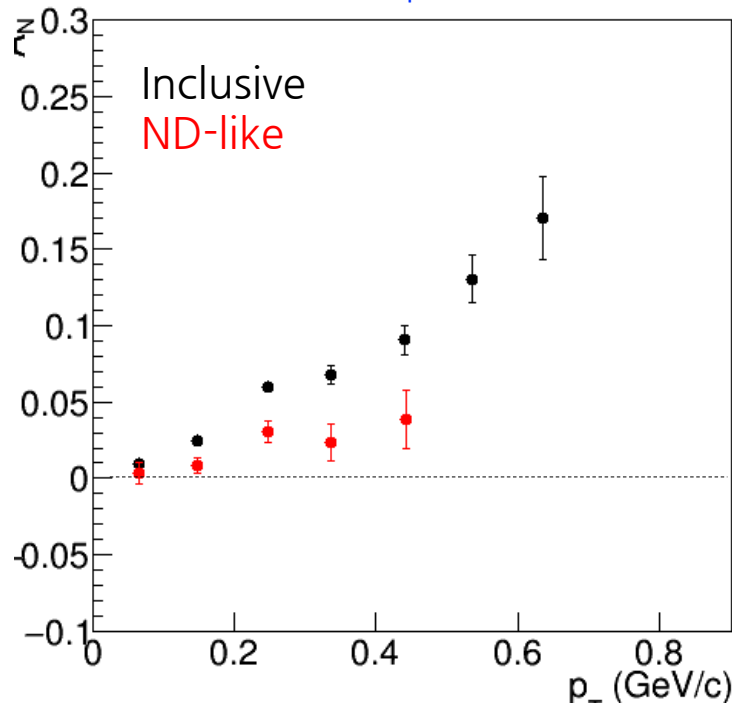
- Higher multiplicity should leave a finite signal in more detectors than lower one  $\rightarrow$  Number of detectors having finite signal can provide the level of multiplicity.
- $A_N$  looks anti-proportional only to the multiplicity in West side.

# Non diffraction event type



Signals in all detectors

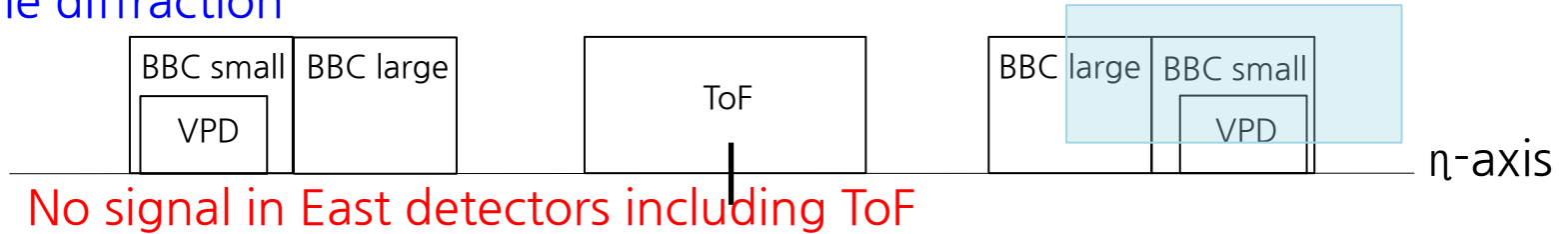
$$0.2 < x_F < 1.0$$



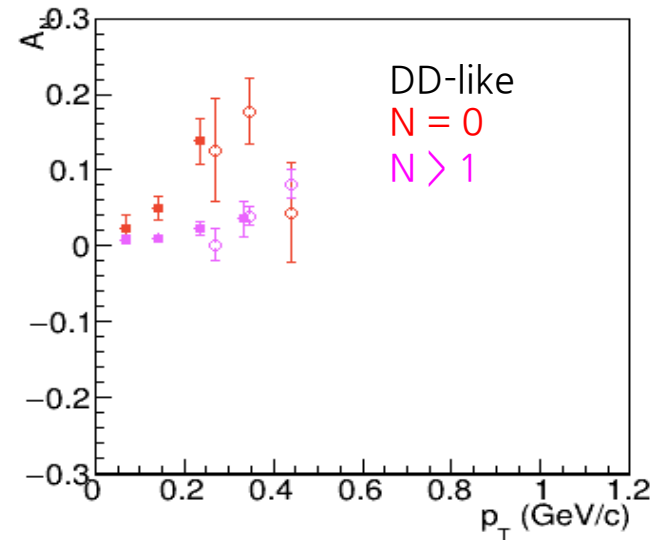
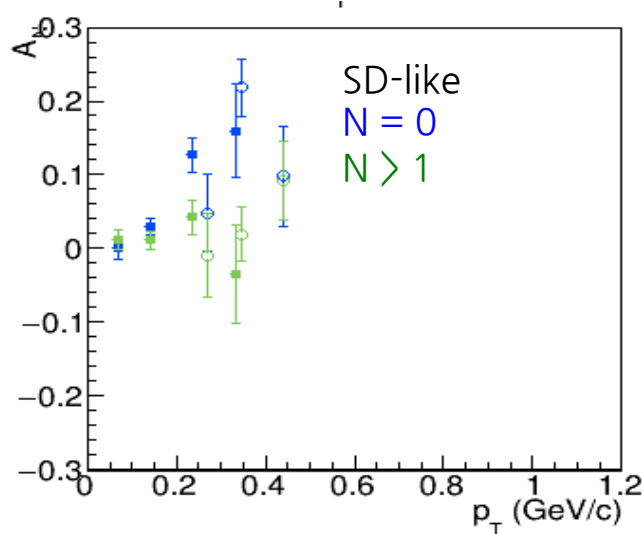
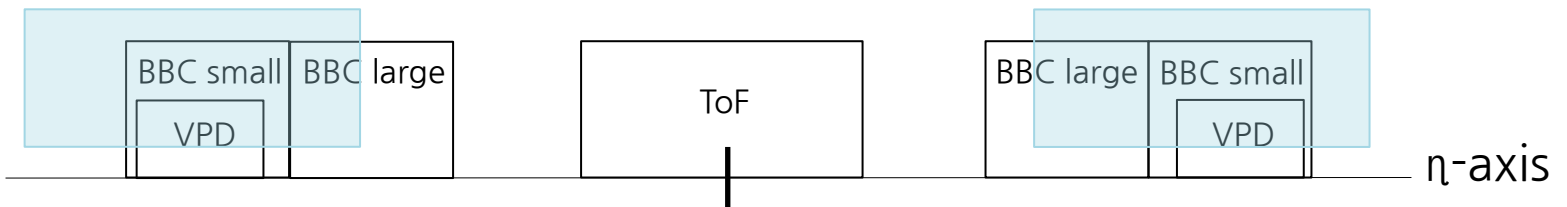
- Not final analysis cut condition.
- No systematic uncertainties were applied.
- But all combined analysis data.
- High multiplicity event makes the  $A_N$  suppressed.

# Single diffraction event type

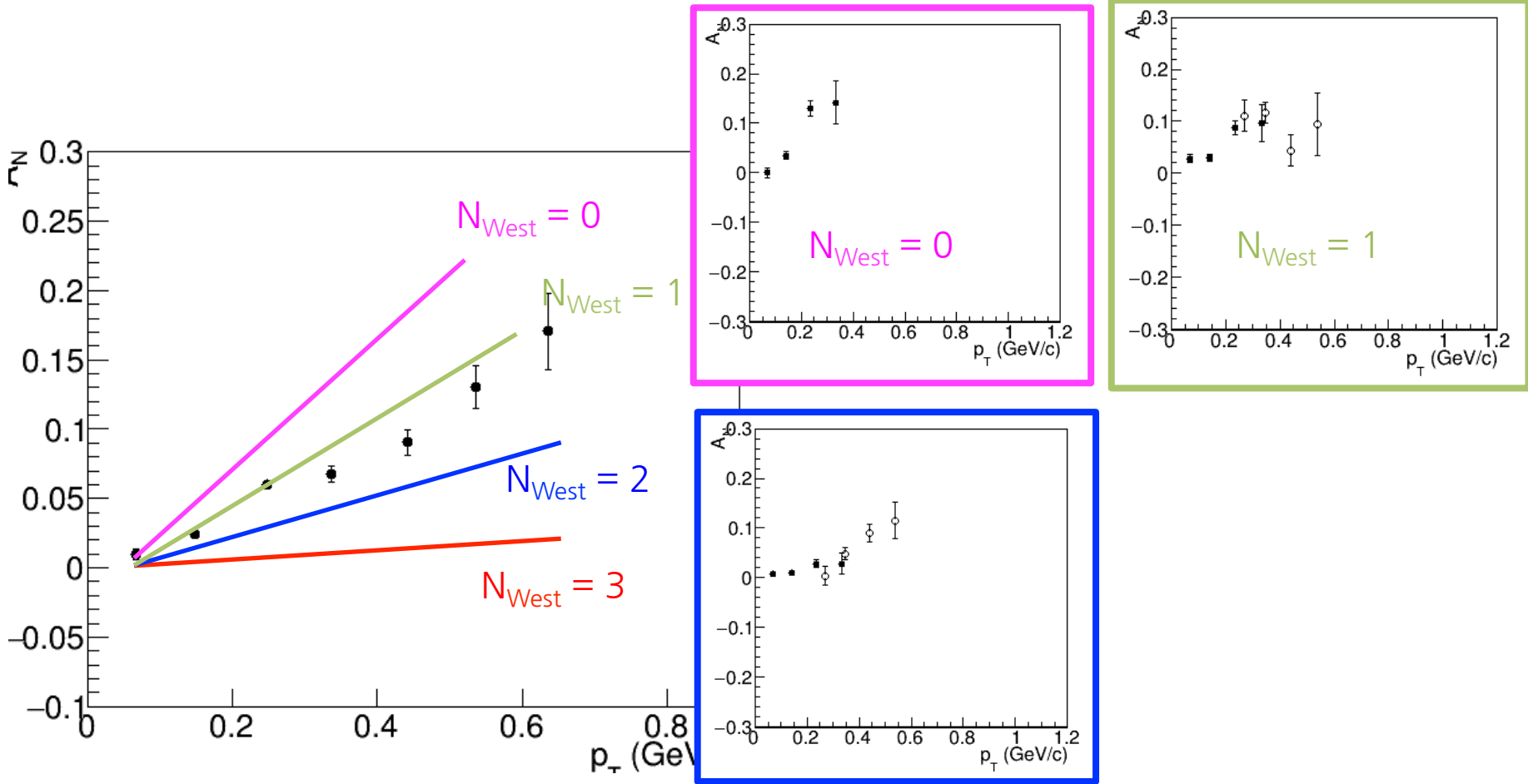
## Single diffraction



## Double diffraction



# Suggestion of an event condition in diffraction



- This is expectation. I'll show the result on next Mon...