

# Analysis Plan during INTT workshop

## Analysis topic

Detection efficiency of INTT with p+p using vertex

## Goal for the workshop

- Estimating detection efficiency of INTT with vertex using simulation.
- Getting information about how to decide vertex position
- Establishing the method to connect the information between vertex and cluster

## Method

1. Find the coordinates A of the cluster in the Outer Layer
2. Connect the collision point and A with the cluster and determine the range expected for the Inner cluster
3. If there are clusters within the expected range and if there are no clusters within the expected range, count the number of clusters in each case as  $N_{Yes}$  and  $N_{No}$  respectively.

$$\varepsilon = N_{yes}/(N_{yes} + N_{No})$$

