

Question 5.2.c):

on the accelerator side, there is no particular advantage in choosing between the two racetracks while retaining 4 interaction points. In both cases, dispersion suppressor cells are required for the interaction points and the RF.

On the detector side it is a complete different story. Having two detectors on the same line might lead to detector noise, fake tracks and pileup. This is because the forward physics of one detector can propagate to the second one. A consistent part of the collision debris can be stopped by collimators, but this is not possible for low interacting particles such as muons.