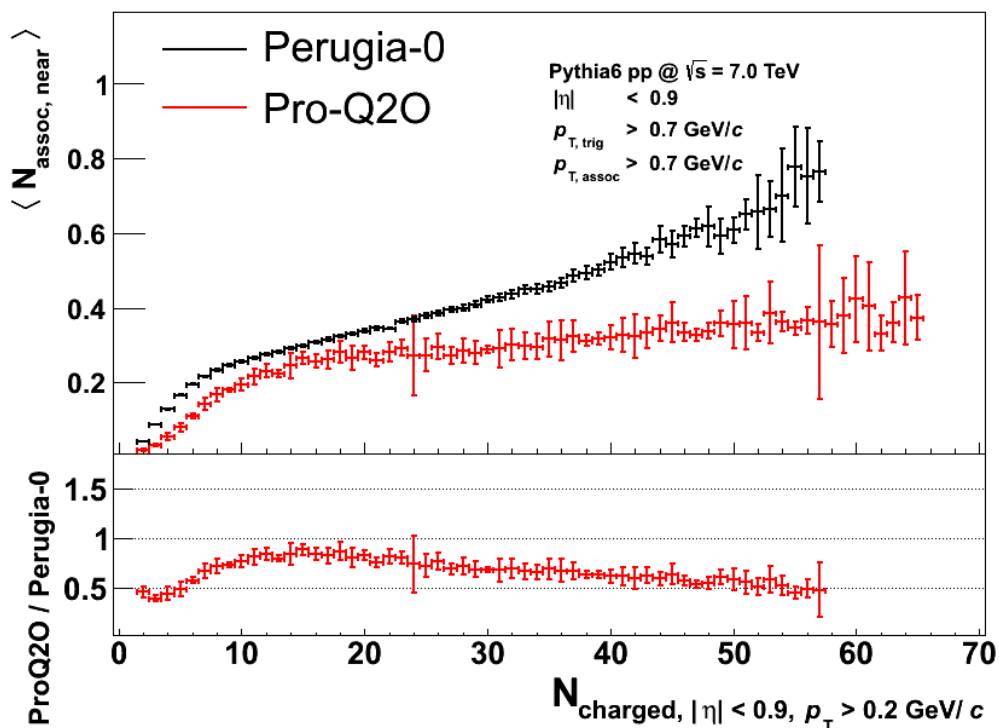# Multiplicity Dependence of Two-Particle Correlations in Proton-Proton Collisions
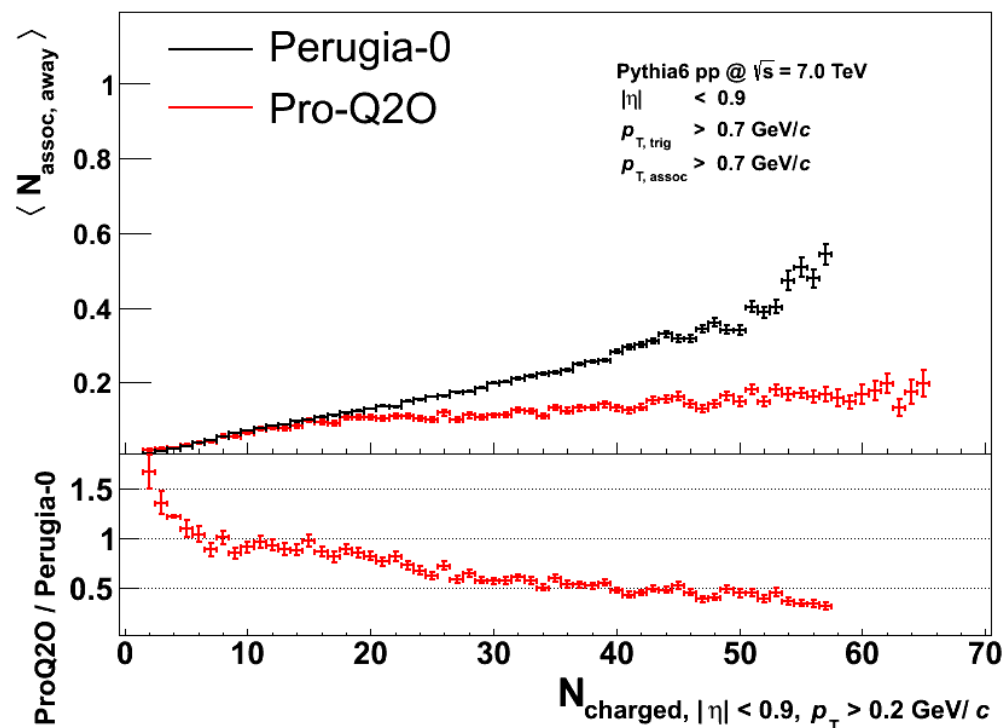
Eva Sicking[1,2] on behalf of the ALICE Collaboration
[1]Institut für Kernphysik, Universität Münster, Germany
[2]CERN, Switzerland
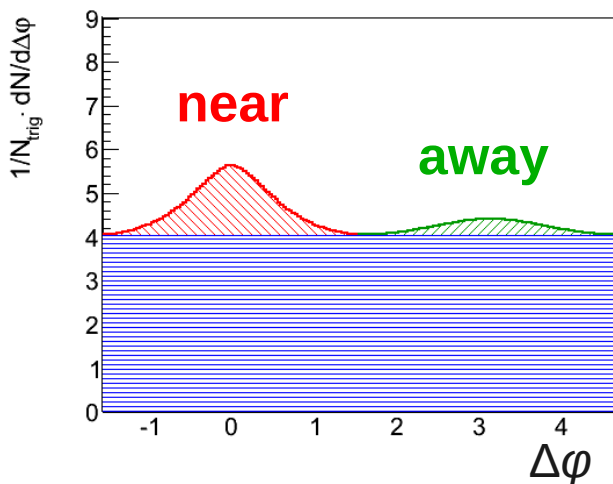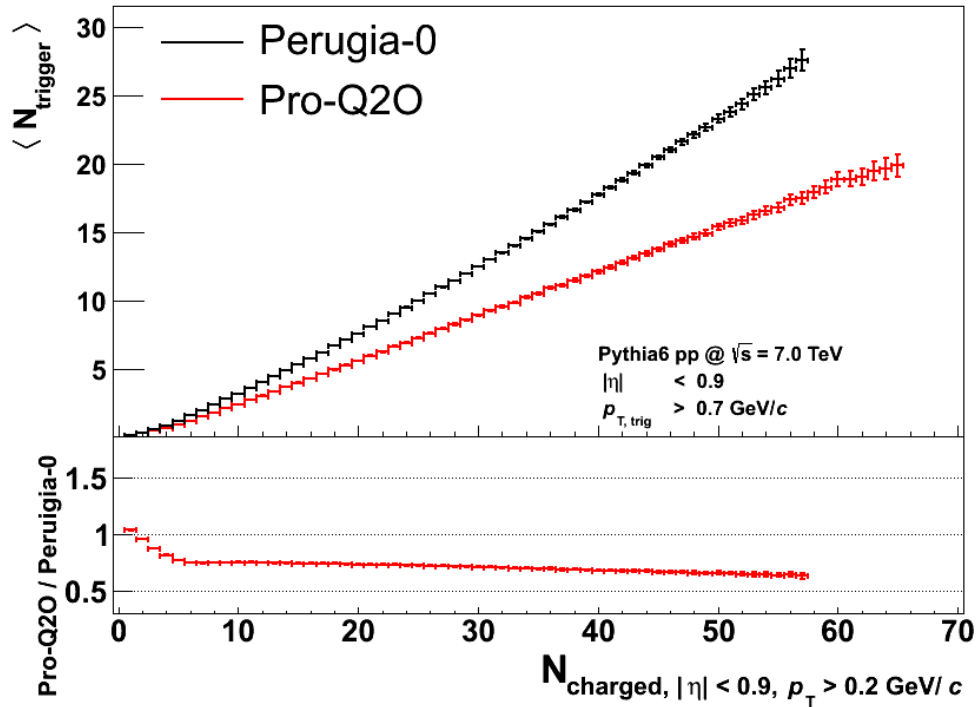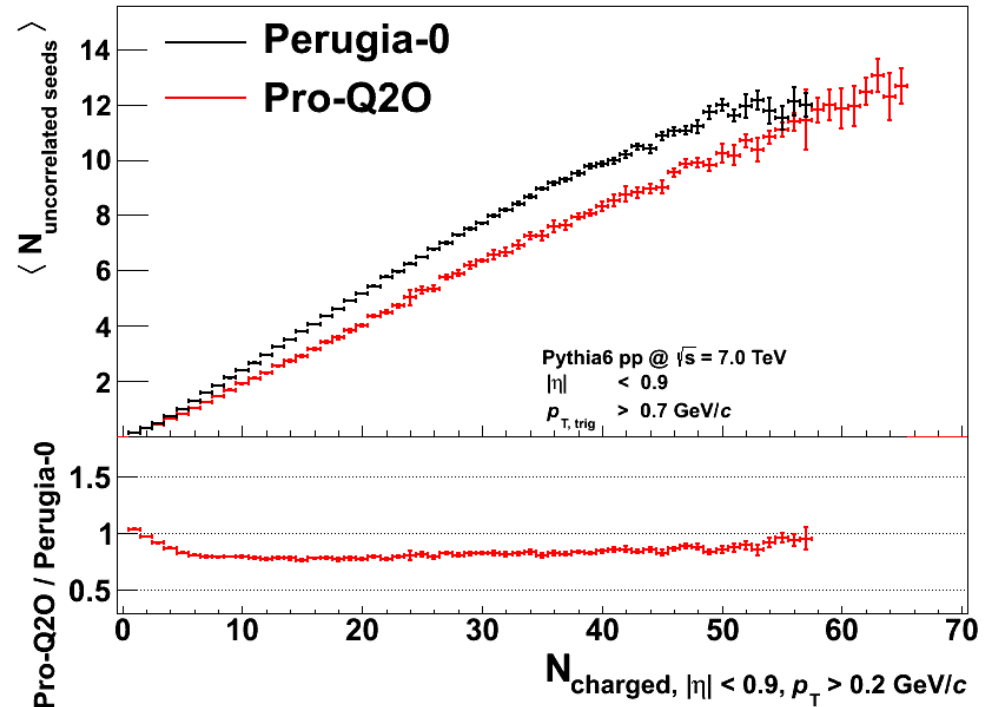
Collider Cross Talk, 01-11-2012

Multiple Parton Interactions in Pythia6

$N_{MPI} = MSTI(31)_{Pythia}$
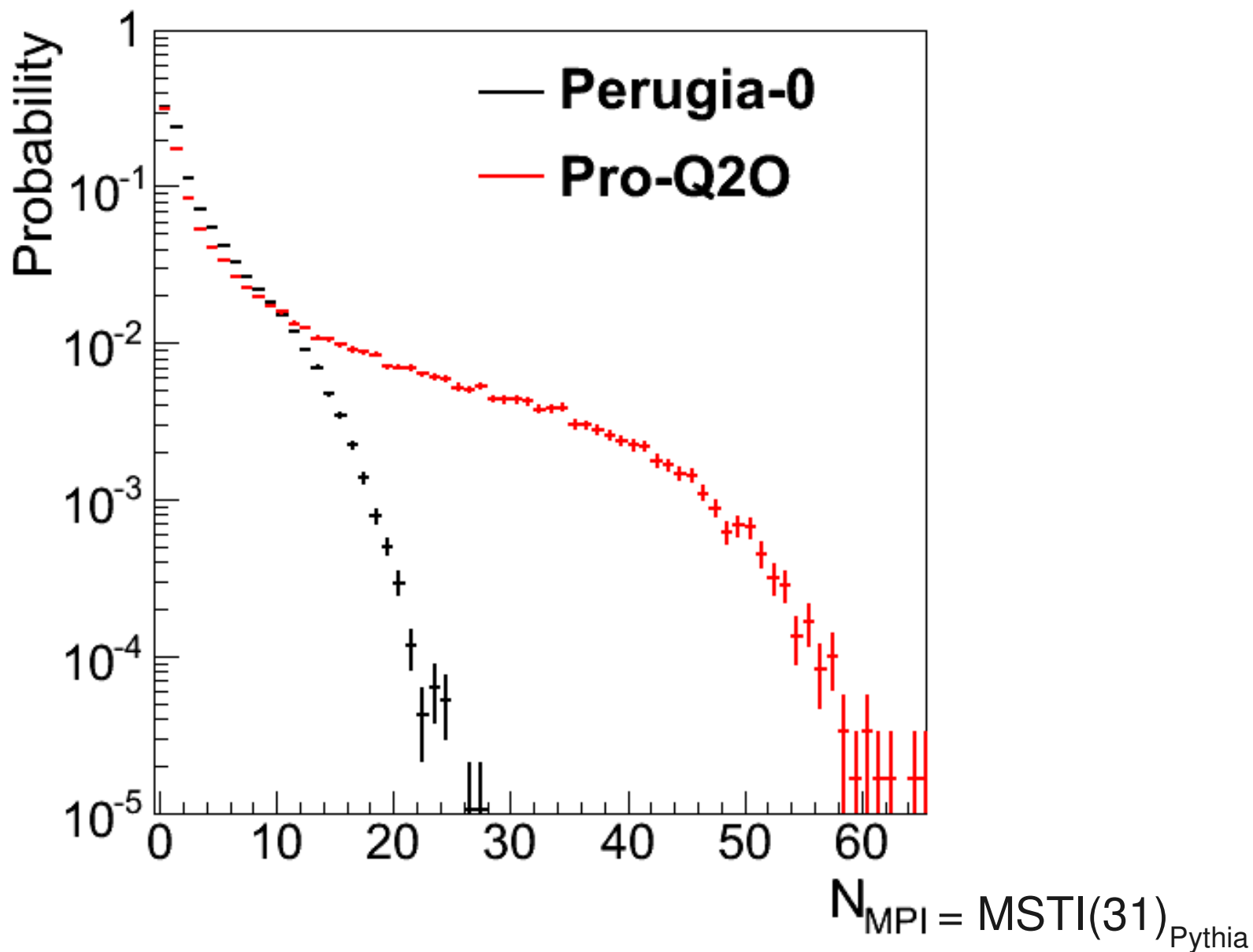
Near side

Away side

<N_trigger>

<N_uncorrelated seeds>

$$\langle N_{uncorrelated\ seeds}\rangle = \frac{\langle N_{trig}\rangle}{\langle 1 + N_{assoc,\ near+away}(p_T > p_{T,trig})\rangle}$$

Per-Trigger Near Side Pair Yield

Per-Trigger Away Side Pair Yield
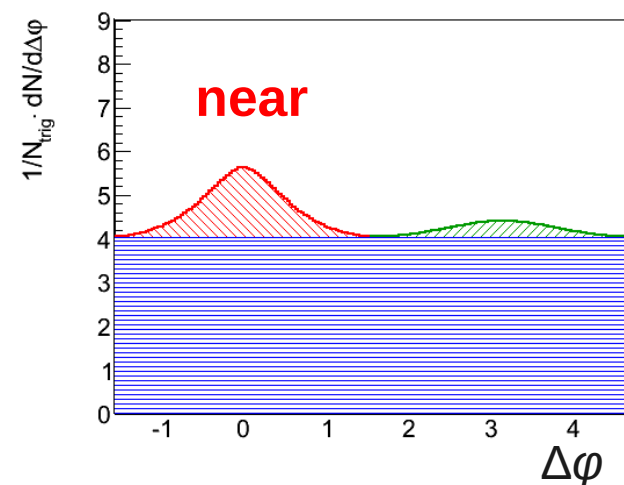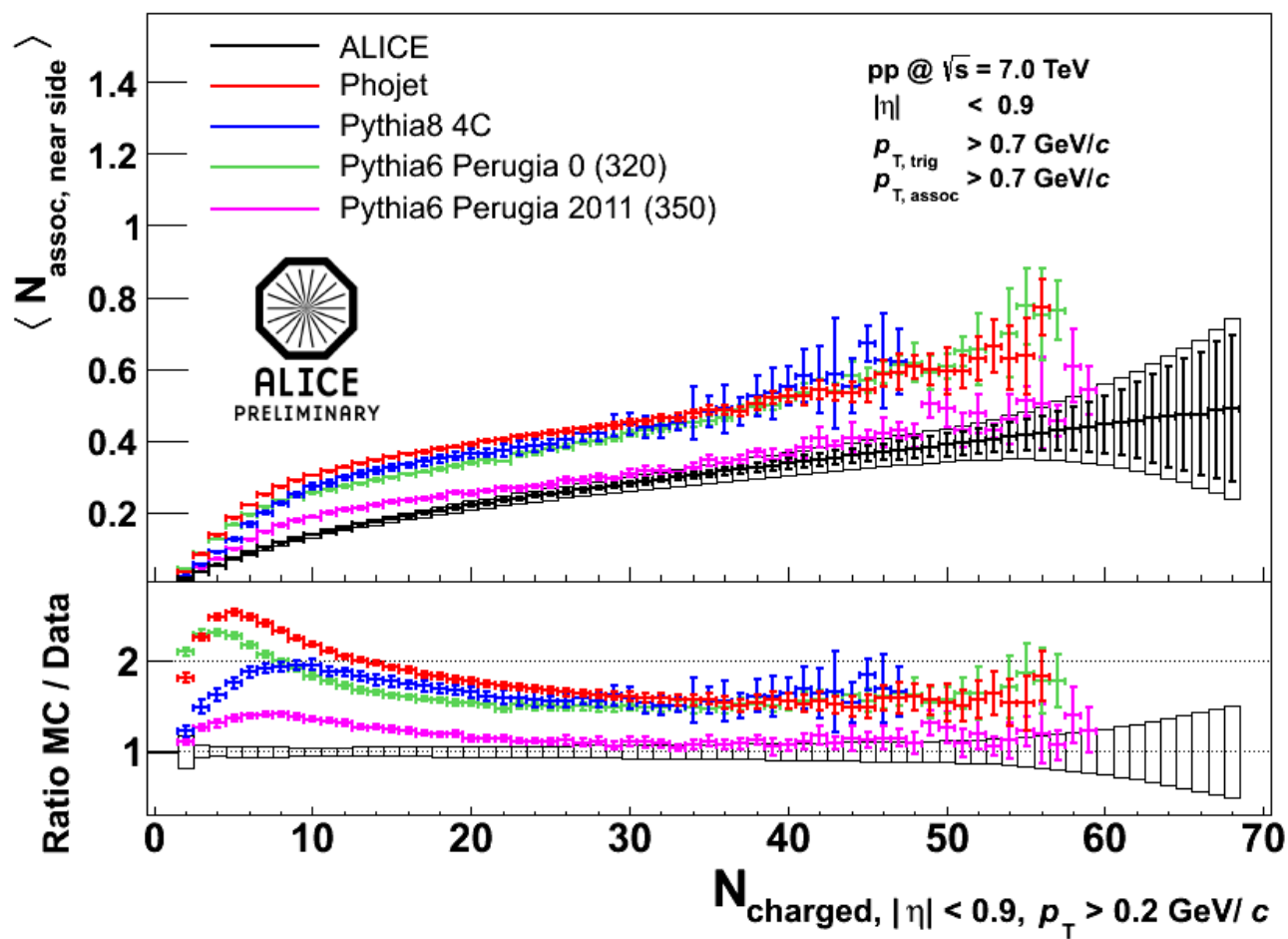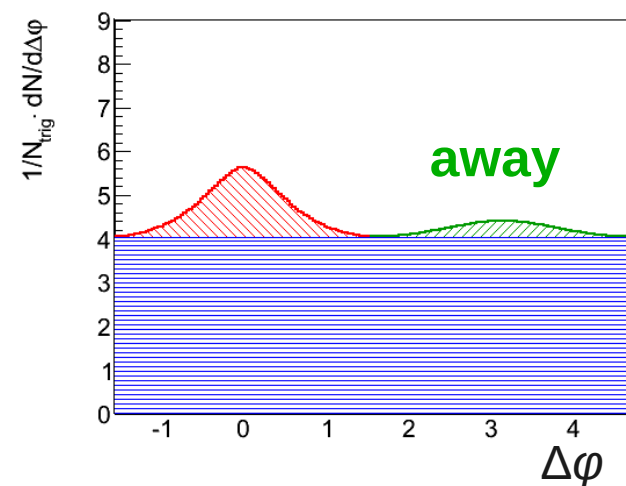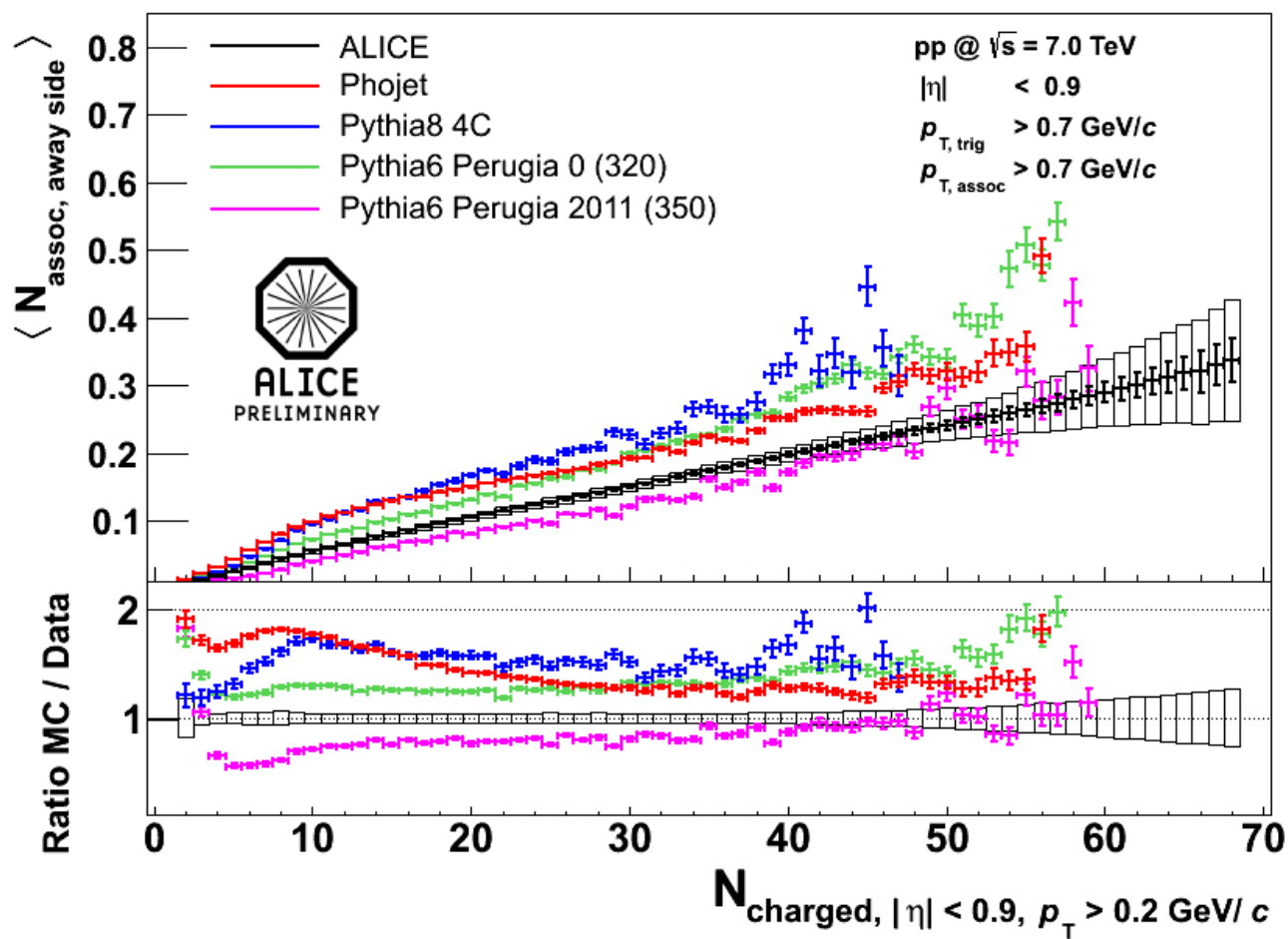
Number of Trigger Particles
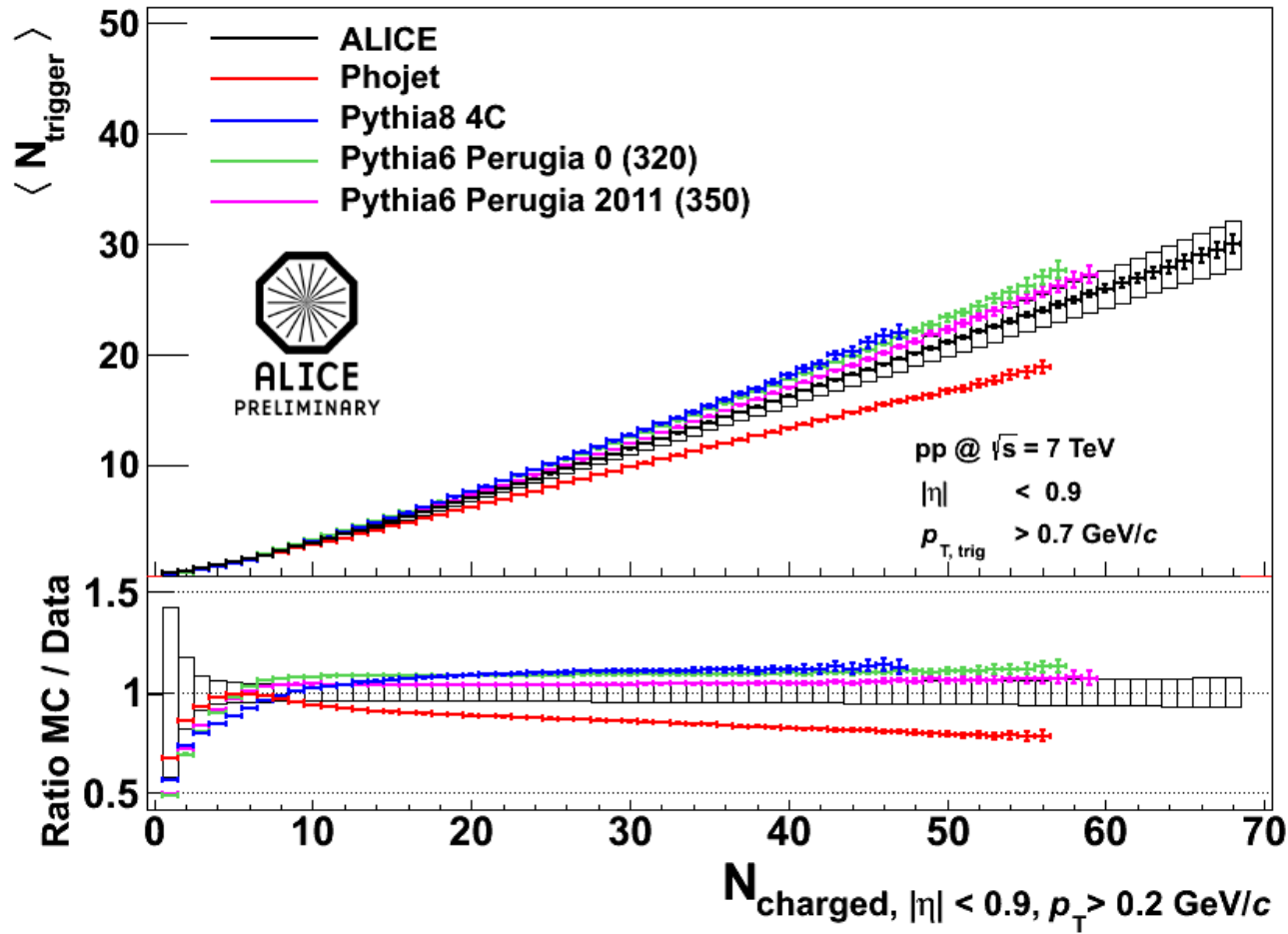
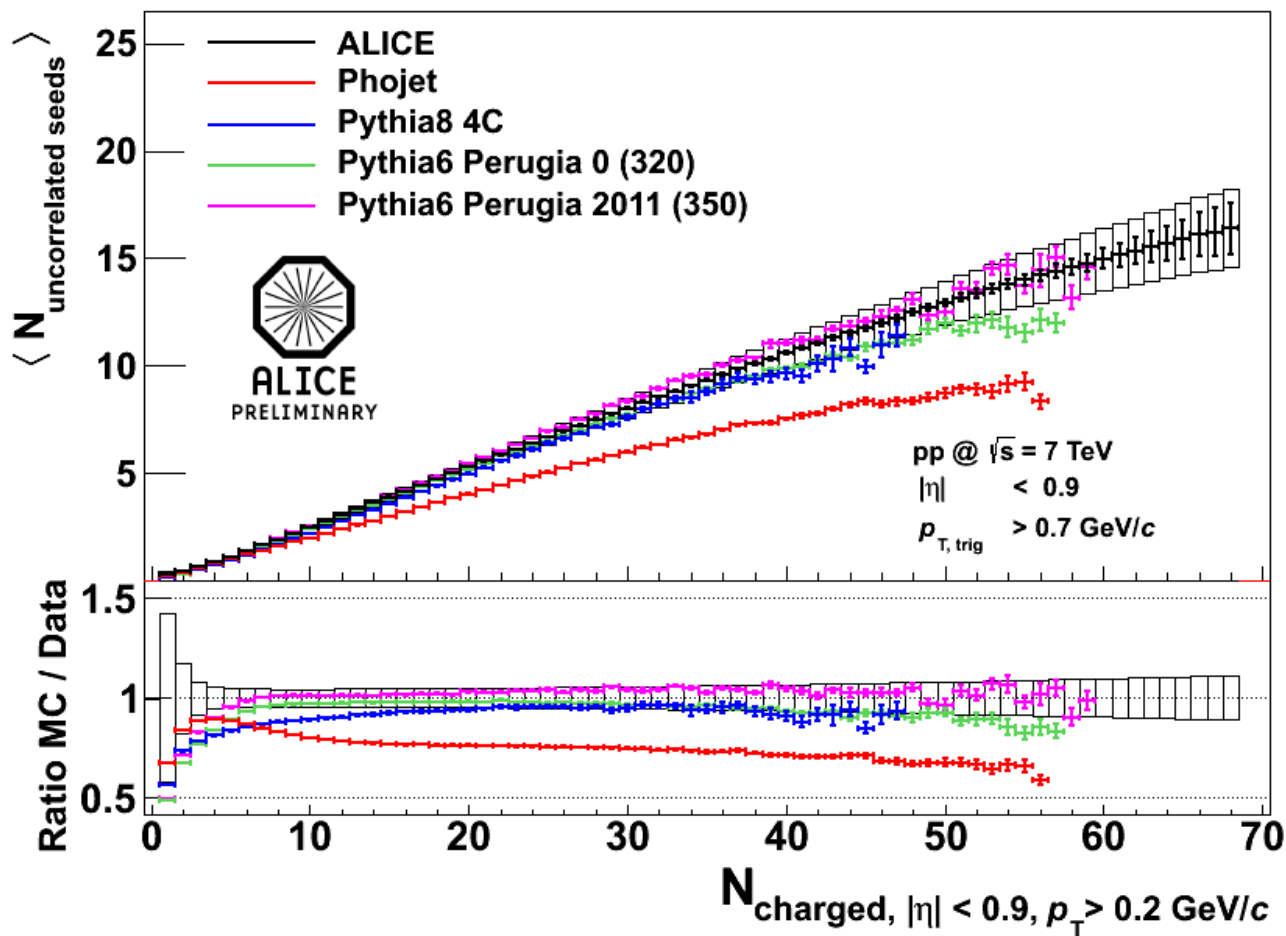# Number of Uncorrelated Seeds

$$\langle N_{uncorrelated\ seeds}\rangle = \frac{\langle N_{trig}\rangle}{\langle 1+N_{assoc,near+away}(p_T>p_{T,trig})\rangle}$$

$<N_{uncorrelated\ seeds}>$ and linear fit

Linear fit function