To do…

Pythia 8 simulations :

- implement HM trigger selection
- run equivalent of 300 M events HM
- check charged particle multiplicity distributions for HM pp + protons spectra
- check resonance cocktail and extract angular distribution
- run r_eff pythia source && r_core pythia
- produce B2 as done for data
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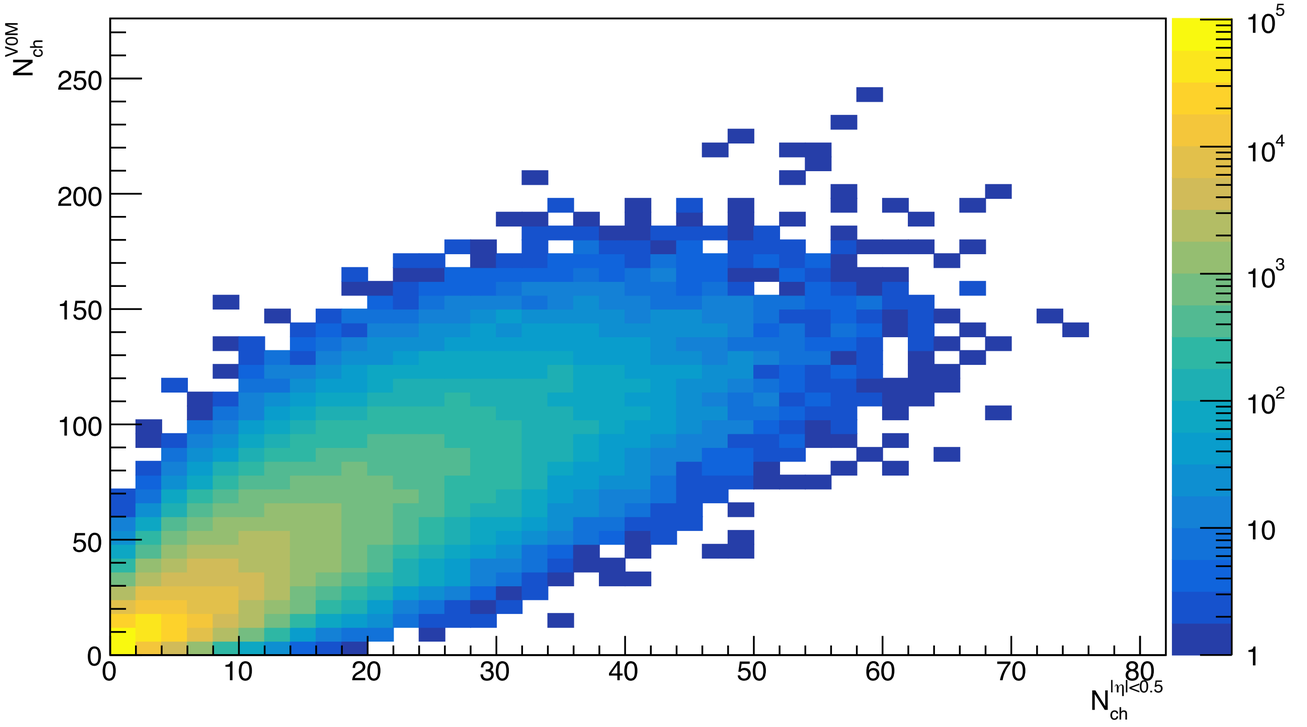
Correlation of V0M and mid-rapidity multiplicity

- Followed similar approach taken by Maxi (slides)
- Correlate charged particle multiplicities in V0M region with mid-rapidity

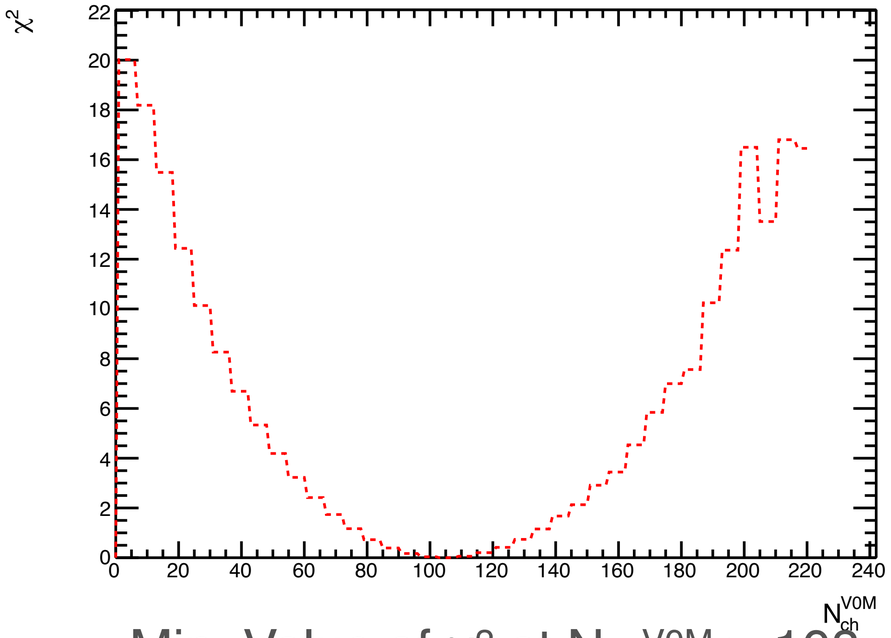


V0M: 2.8< η <5.1 and -3.7 < η <-1.7

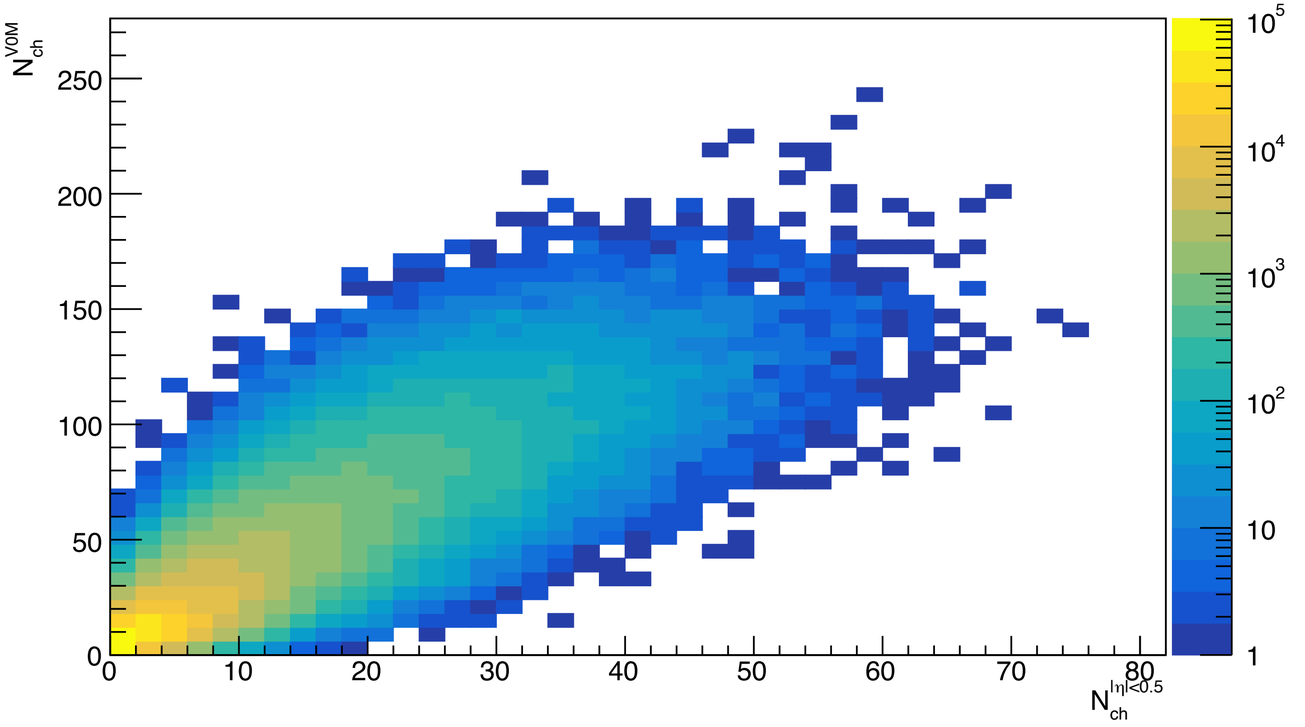
Mid-rapidity: -0.5 < η < 0.5

Correlation of V0M and mid-rapidity multiplicity

- Followed similar approach taken by Maxi (slides)
- Correlate charged particle multiplicities in V0M region with mid-rapidity
- Trigger for different V0M multiplicities and compare mid-rapidity to ALICE measurement
- χ^2 obtained from the mean of the mid-rapidity N_{ch} distribution



Min. Value of χ^2 at $N_{ch}^{V0M} > 108$



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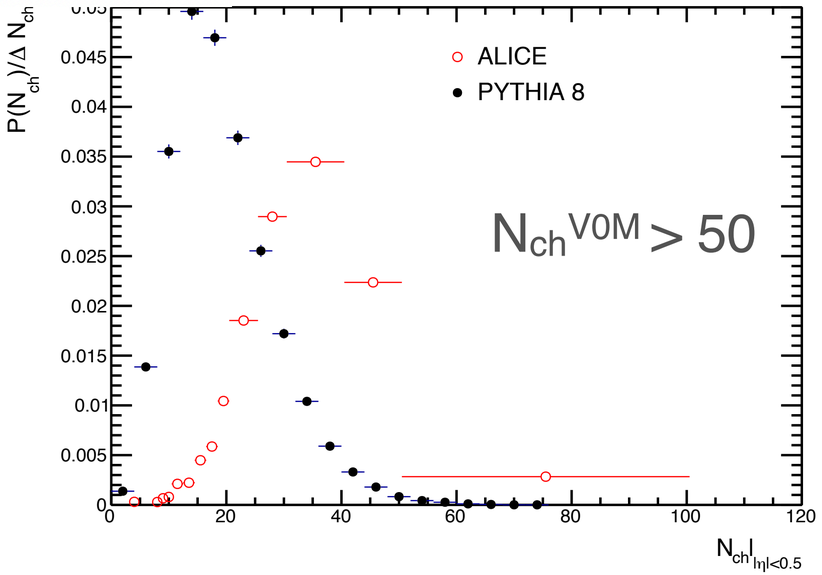
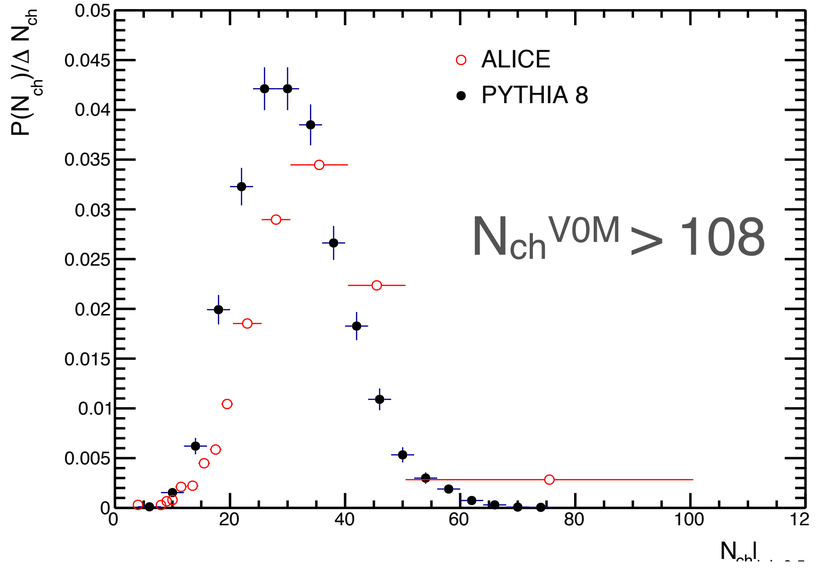
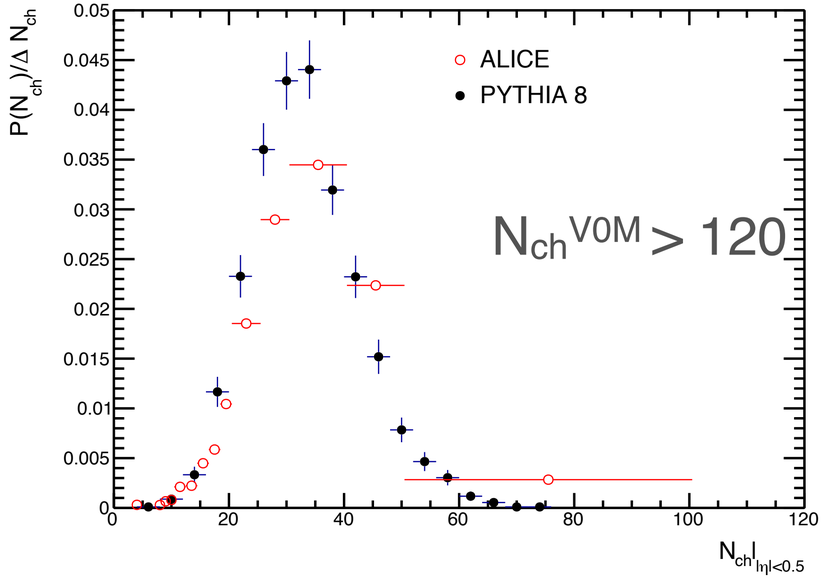
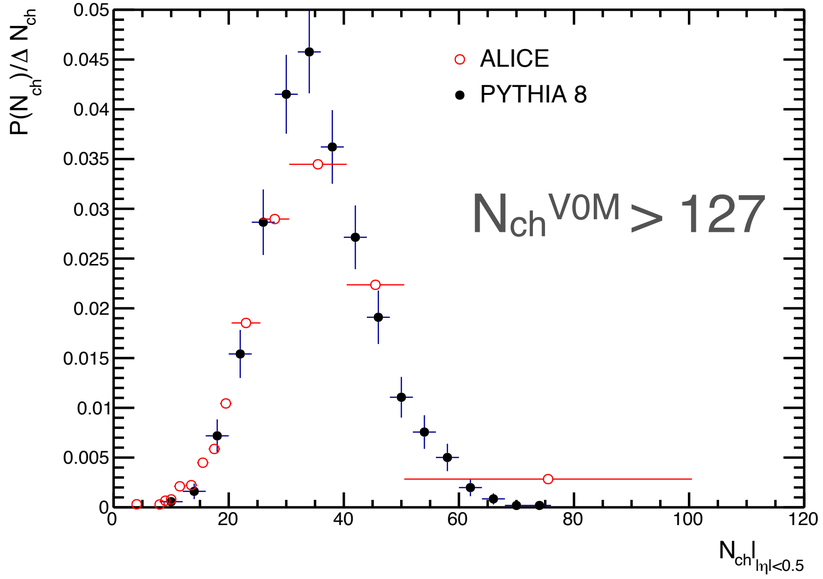
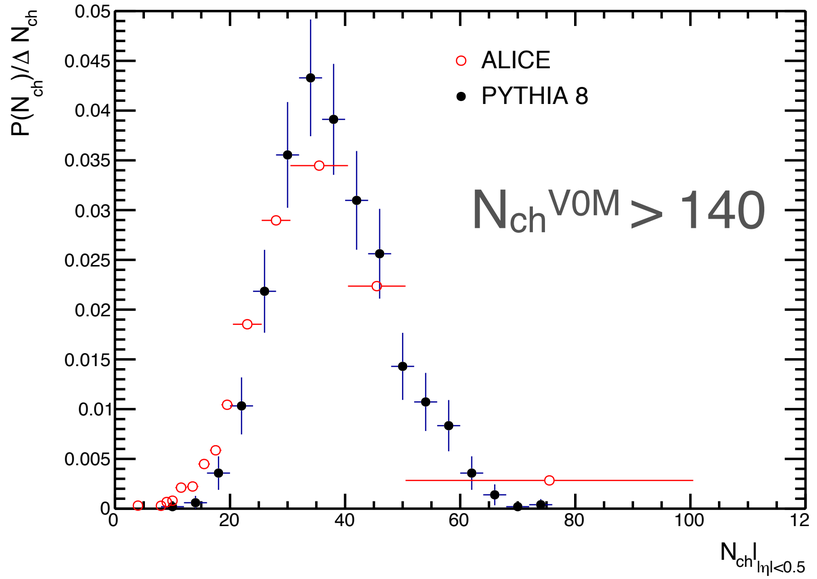
Comparison with ALICE data

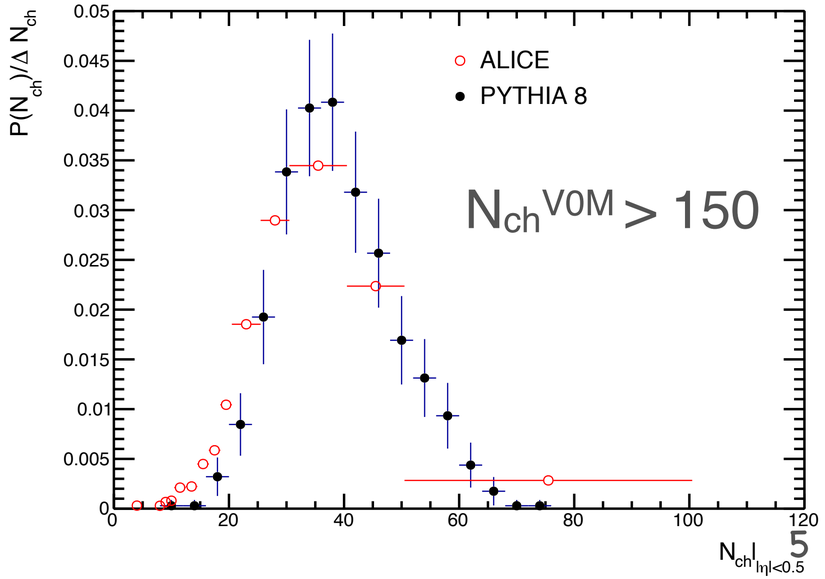






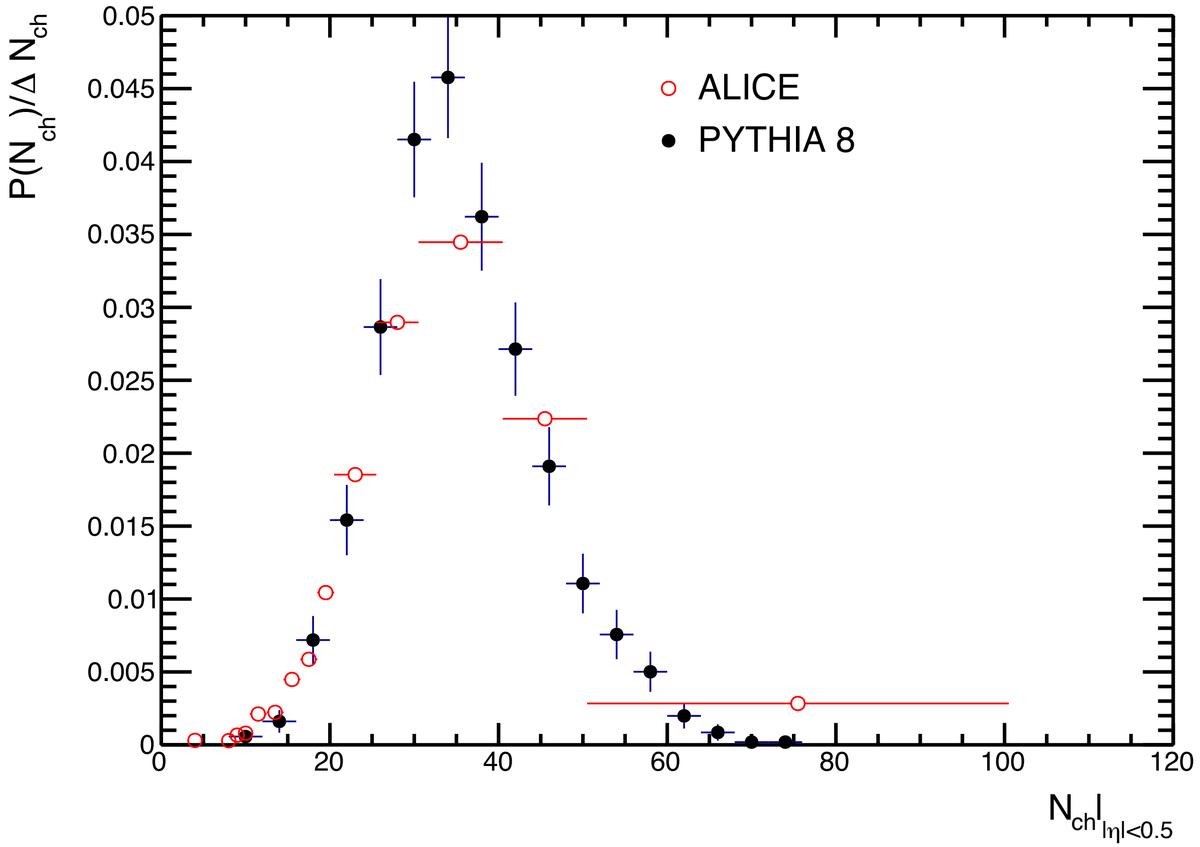


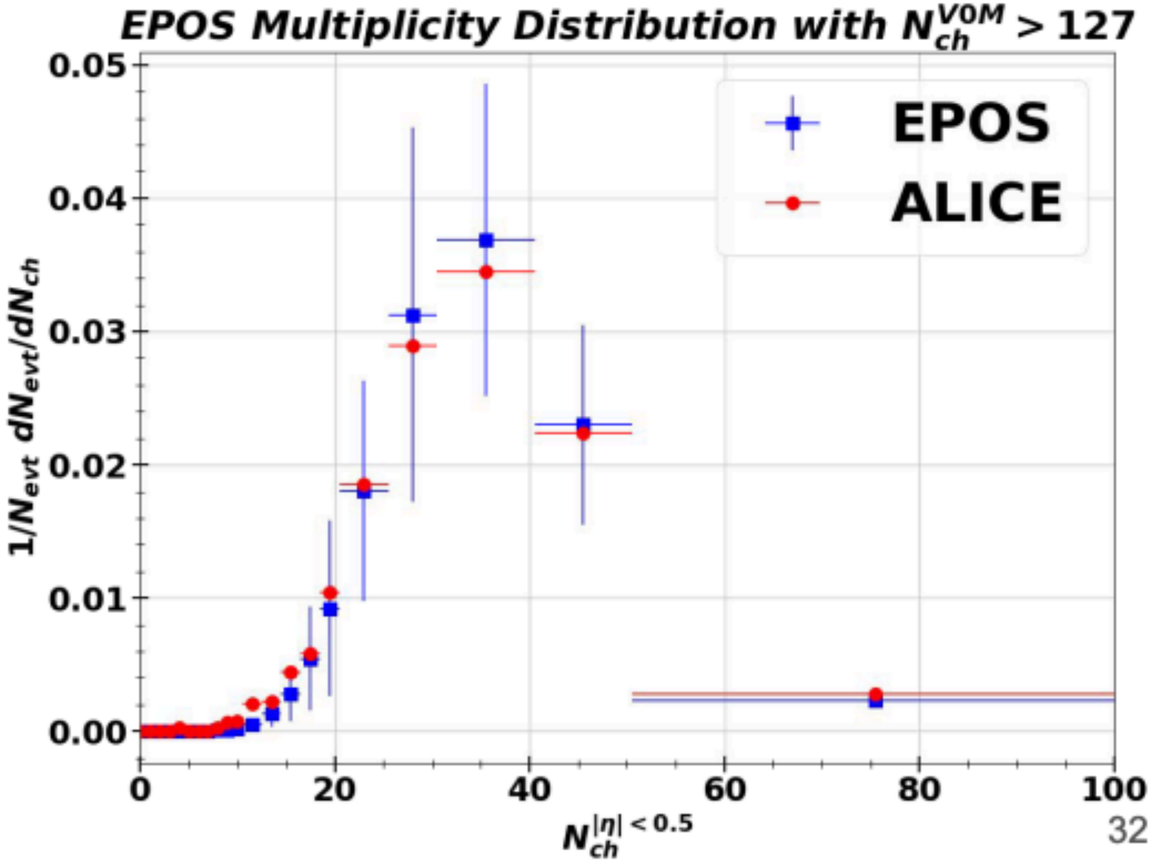




Comparison with EPOS

$N_{ch}^{V0M} > 127$





From Maxi's (slides)