Revised PHQMD analysis for trigger efficiency

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Outline

- Used DCM-QGSM-SMM and PHQMD models for MPD trigger efficiency studies
- Recently it was found that PHQMD code was run with wrong masses of the fragments (x3 lower) + fragments had a limited lifetime with undefined decay modes (fragments were killed by Geant-4)
- Produced two private productions using the same input PHQMD files:
 - \checkmark with correct masses of the fragments
 - ✓ with reduced masses of the fragments and limited lifetime (previously presented results)
- Present comparison of results

Trigger efficiency vs. impact parameter

FHCAL trigger efficiecny vs. impact parameter

• Previous results



8 central (8c) 8 central (8c) 4 central (24c) 4 central (24c) 5 central (44c) 6 central (44c) 7 central (44c) 8 central (44c) 9 central (44c)</p



• Correct code



FHCAL trigger efficiecny vs. impact parameter





Trigger efficiency vs. z-vertex

• Previous results







• Correct code



FHCAL trigger efficiecny vs. z-vertex



FFD||FHCAL trigger efficiecny vs. z-vertex



Conclusions

- Observe marginal changes in the MPD trigger performance
- The main conclusions for PHQMD model remain to be the same
- Correct code is used for mass production Requests 27 and 29