

Status of the PHQMD production

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2020-09-02 MPD PWG2 meeting

Out request: Bi+Bi, $\sqrt{s_{NN}} = 8.8$ GeV, min. bias¹, 15.000.000 events.

Model: PHQMD + MST² (light nuclei, hypernuclei).

MpdRoot: “tpcDedx” branch.

Test production 1, 2 : 200.000 events.

¹ – Impact parameter $b = 0 - 16$ fm.

² – MC data is still on the NICA cluster (“phsd.dat” ASCII format).

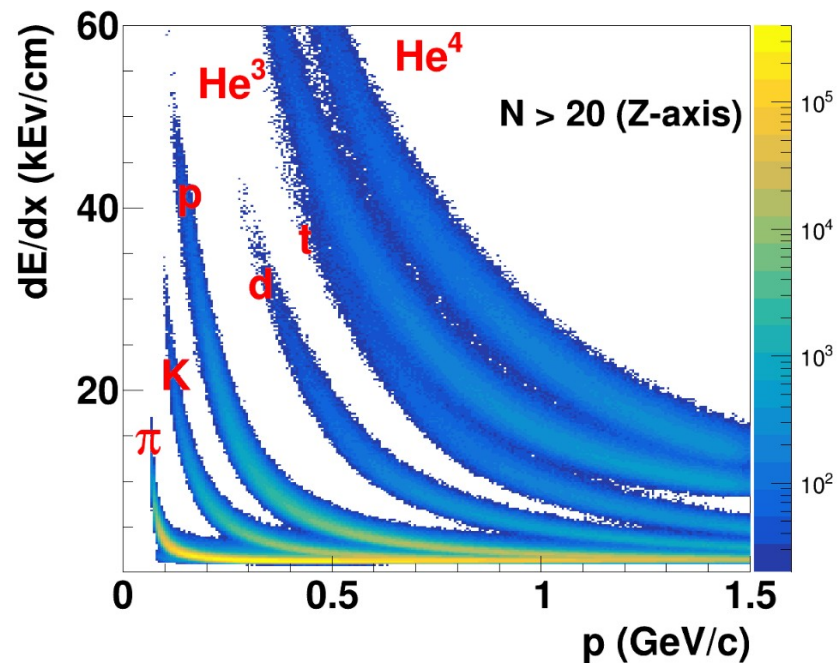
Bi+Bi, $\sqrt{s_{NN}} = 8.8$ GeV, min. bias, 200.000 events

Expected

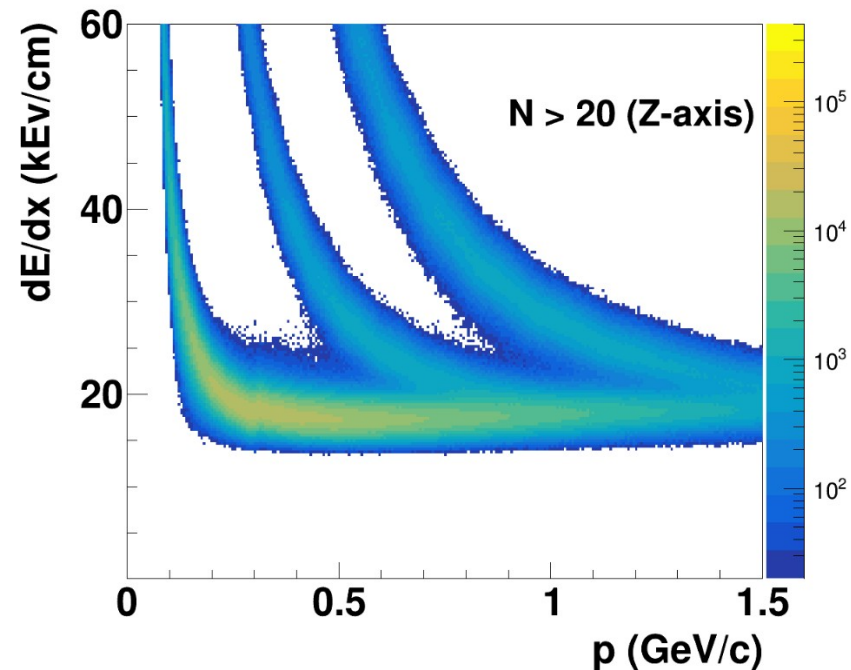
Checks by A. Mudrokh

Observed

dE/dx VS p



dE/dx VS p (mass production)

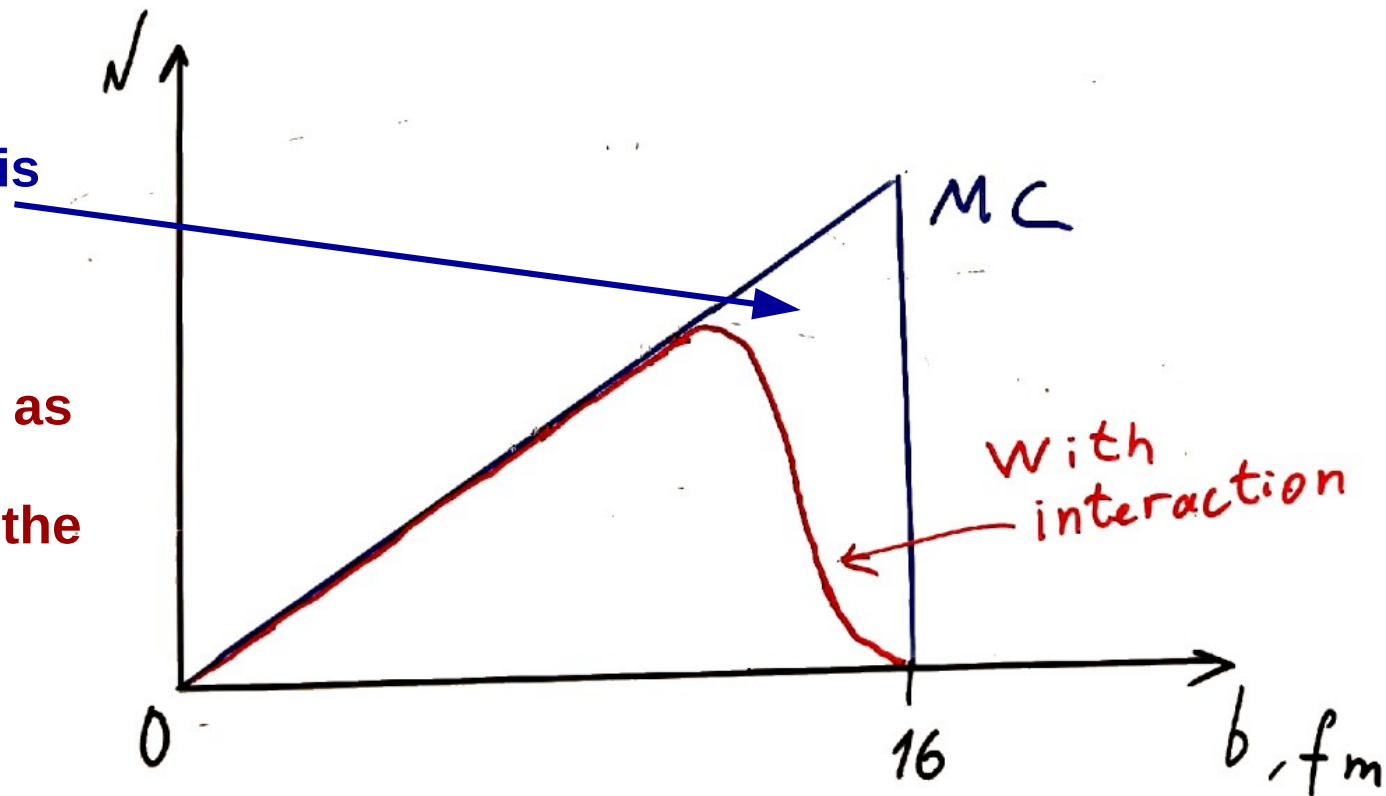


Wrong git branch: **dev** instead of **tpcDedx**

Bi+Bi, $\sqrt{s_{NN}} = 8.8$ GeV, min. bias, 200.000 events

“Empty” events issue is not an issue.

Strangeness studies should not be affected as strange particles are created in events with the interaction.



Test production 2: dE/dx problems of “Test production 1” were solved*.

A. Moshkin on 01.09:

- 1) ~11 M of events are ready
- 2) 15M of events will be on the NICA cluster at the end of this week

11M of events in 4 days: more than 2.5M per day – quite fast

Plans for next production requests:

- a bit narrowed impact parameter range to reduce the number of events without interaction

* – See slides with studies of A. Zinchenko, A. Mudrokh, V. Vasendina