

Update on C7/C8/... comparison

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- so far:
 - energy spectra of different species at given X ($< X_{\max}$)
 - be careful with different SIBYLL 2.3c's...
 - C8 very similar to CONEX, different from C7

- now:
 - another point of view
 - look at all interactions in the shower: $dN_{\text{interactions}}/dE$
 - in C7 with COAST `interaction(CInteraction&)`
 - in C8 currently a wrapper around SIBYLL
 - Q: COAST possible in CONEX, too?

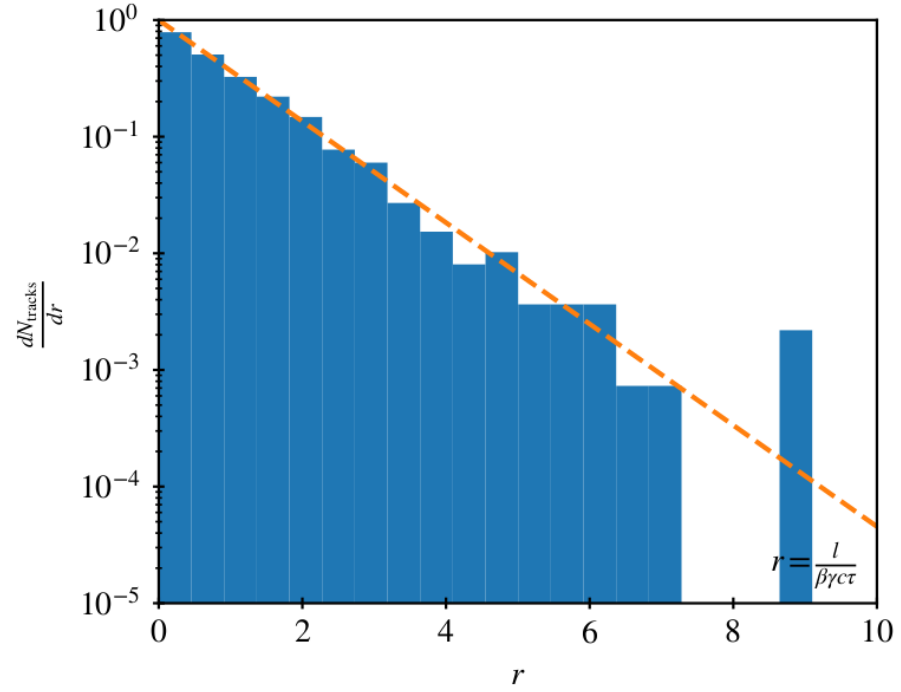
→ open interaction_histogram.pdf

- plateau makes sense: decays prohibit further interactions (lifetimes $\sim 10^{-10}$ s)

The issue with σ_0

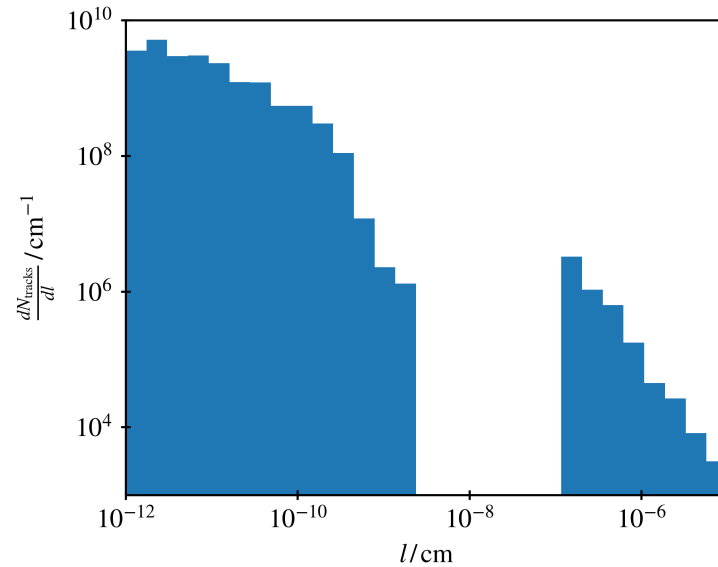
- lifetime $7 \cdot 10^{-20}$ s (less than π^0 !)
- should not interact but does?!
- look at tracks with COAST (`track(pre, post)`)
followed/not followed by `interaction()`
- would be nice to have `decay()` in COAST...
- cross-sections look ok (~ 280 mb)

distribution of tracks before decay



seems ok!

distribution of tracks before interact.



there must be a bug!

comparison of event gen. interfaces

- Anatoli's and Ralf's effort with MCEq / CRMC
- see spectra_mceq_crmc.pdf
- looks mostly ok, except for lambda from SIBYLL
- Q: 2.3c0x version issue?
- Q: How well does CRMC resemble C8 interface?