

CDR and beam halo muons

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Cc: Konrad Elsener

- presentation by Daniel at CDR review (slide 18):

"0.05 muons per bunch crossing with no spoilers;

other sources to be reviewed"

- presently stated in CDR Vol. 2

(a) 2.1.2.3

"Preliminary results indicate that it is realistic to aim for an average of **one muon per bunch crossing** (combined from both beams) traversing the detector volume"

TEXT OF THIS SECTION HAS BEEN CHANGED AND COMMITTED - NEEDS TO BE CHECKED BY MARK AND LUCIE, at least...

(b) 5.3.3.

"For each bunch crossing, and **1 beam-halo muon** are overlaid."

SUGGEST TO LEAVE THIS STATEMENT AND THE FIGURE 5.9 UNCHANGED

(c) 6.1.2.

"..... large "catastrophic" energy depositions by muons do occur"

THIS SENTENCE HAS MEANWHILE BEEN CHANGED.

(d) 8.1.2

"For this report we assume that the total number of halo muons entering the detector from both sides is **one per bunch crossing**, hence about 300 in the time interval of a train"

8.2.2.

"...; second, the single channel occupancy, for which the background of beam halo muons represents an important contribution."

8.2.2.2

"The channel occupancy is driven by the number of beam-halo muons crossing the detector...

... able to cope with 300 muons per bunch train."