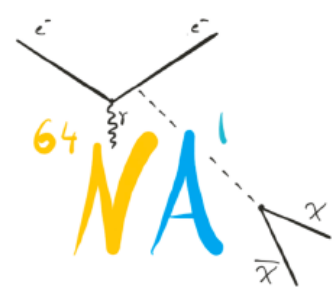


Status of NA64e run @H4

SPS&PS users meeting 16.05.2024

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Many thanks to the BE-EA group, in particular Sylvain, Nikos and Michael



Summary of the week

- We continue data taking since last week and we collected 1.2×10^{11} EOT with an average intensity of 6.5×10^6 e-/spill. There were problems during the weekend with the beam but overall good beam quality and periods with 2-3 spills.
- We collected data at higher intensities to evaluate the beam quality and the performance of our detectors at 6.8×10^6 e-/spill, 7×10^6 e-/spill, 8×10^6 e-/spill and 9.4×10^6 e-/spill.
 - From the preliminary inspection during data taking we do not observe significant changes compared to 6×10^6 e-/spill: beam profile, halo rate, calorimeters and SRD. At 9.4×10^6 e-/spill the halo rate slightly varies increasing the rate in V0 from 5.2% to 5.6% and in V1 from 29% to 31%.
 - Further analysis on these runs is needed to obtain final conclusions
 - This morning we are checking the maximum delivered by the line observing the beam profile. Still good quality at 11, 12 and 13 $\times 10^6$ e-/spill. At the highest intensity V0 increased from 5.2% to 9% and V1 from 29% to 46.7%.

- Yesterday, we observe a sinusoidal behaviour of the beam in the vertical direction that thanks to Nikos was triggered as a possible misbehaviour of one magnet power supply. We want to thank the fast intervention of the first line people who exchange the regulator card on the NR22-012 (022053) which was the one oscillating more.
 - We do not see any sinusoidal behaviour since yesterday evening.

