HL-LHC v1.6. E = 7.0 TeV. $CC = -190.0 \mu \text{rad}$. $N_b \simeq 1.03 \times 10^{11} \text{ ppb}$, $L_{1/5} = 4.99 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}, L_2 = 1.12 \times 10^{30} \text{cm}^{-2} \text{s}^{-1}, L_8 = 1.98 \times 10^{33} \text{cm}^{-2} \text{s}^{-1}$ $PU_{1/5} = 130$, $\beta_{x=1}^* = 0.075$ m, $\beta_{y=1}^* = 0.18$ m, polarity $IP_{2/8} = 1/1$ $\Phi/2_{1(V)} = 250 \,\mu\text{rad}, \,\Phi/2_{5(H)} = 250 \,\mu\text{rad}, \,\Phi/2_{2,V} = -170 \,\mu\text{rad}, \,\Phi/2_{8,V} = 170 \,\mu\text{rad}$ $\sigma_z = 7.61$ cm, $\varepsilon_n = 2.5$ µm, O' = 5.0, $I_{MO} = 60.0$ A, $C^- = 0.001$ 25ns_2760b_2748_2492_2574_288bpi_13inj_800ns_bs200ns_converted.json. Bunch 149. 60.329 -8.0 60.323 -60.321 -60.319 -60.317 -- 5.0 60.315 -- 4.5 60.313 -60.311 -60.309 -Horizontal tune Q_x

/ertical tune Q_v