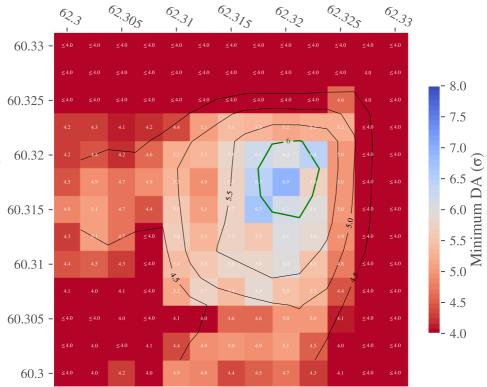
HL-LHC v1.6. E = 7.0 TeV. CC = -190.0 μrad. $N_b \simeq 1.14 \times 10^{11}$ ppb, $L_{1/5} = 5.29 \times 10^{34} cm^{-2} s^{-1}$, $L_2 = 1.51 \times 10^{30} cm^{-2} s^{-1}$, $L_8 = 1.98 \times 10^{33} cm^{-2} s^{-1}$ PU_{1/5} = 139, $β_{x, 1}^* = 0.15$ m, $β_{y, 1}^* = 0.15$ m, polarity IP_{2/8} = 1/1 Φ/2_{1(H)} = 250 μrad, $Φ/2_{5(V)} = 250$ μrad, $Φ/2_{2, V} = -170$ μrad, $Φ/2_{8, V} = 170$ μrad $σ_z = 7.61$ cm, $ε_n = 2.5$ μm, Q' = 15, $I_{MO} = -300.0$ A, $C^- = 0.001$ 25ns_2760b_2748_2492_2574_288bpi_13inj_800ns_bs200ns.json. Bunch 150.



Vertical tune Q_v

Horizontal tune Q_x