

HL-LHC v1.6. E = 7.0 TeV.  $N_b \simeq 2.2 \times 10^{11}$  ppb,

$L_{1/5} = 2.52 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ ,  $L_2 = 6.87 \times 10^{30} \text{ cm}^{-2} \text{ s}^{-1}$ ,  $L_8 = 1.97 \times 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$

$\beta_{x,1}^* = 1.1 \text{ m}$ ,  $\beta_{y,1}^* = 1.1 \text{ m}$ , polarity  $\text{IP}_{2/8} = 1/1$

$\Phi/2_{1(V)} = 250 \text{ } \mu\text{rad}$ ,  $\Phi/2_{5(H)} = 250 \text{ } \mu\text{rad}$ ,  $\Phi/2_{2,V} = -170 \text{ } \mu\text{rad}$ ,  $\Phi/2_{8,V} = 170 \text{ } \mu\text{rad}$

$\sigma_z = 7.61 \text{ cm}$ ,  $\epsilon_n = 2.3 \text{ } \mu\text{m}$ ,  $Q' = 15$ ,  $I_{MO} = -300.0 \text{ A}$ ,  $C^- = 0.001$

25ns\_2760b\_2748\_2492\_2574\_288bpi\_13inj\_800ns\_bs200ns.json. Bunch 150.

