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

 $L_{1/5} = 2.44 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}, L_2 = 6.71 \times 10^{30} \text{cm}^{-2} \text{s}^{-1}, L_8 = 1.97 \times 10^{33} \text{cm}^{-2} \text{s}^{-1}$  $\beta_{v, 1}^* = 1.8 \text{ m}, \beta_{x, 1}^* = 0.9 \text{ m}, \text{ polarity IP}_{2/8} = 1/1$ 

 $\Phi/2_{1(H)} = 250$  μrad,  $\Phi/2_{5(V)} = 250$  μrad,  $\Phi/2_{2,V} = -170$  μrad,  $\Phi/2_{8,V} = 170$  μrad  $\sigma_z = 7.61$  cm,  $\varepsilon_n = 2.3$  μm, Q' = 15,  $I_{MO} = -150$  A,  $C^- = 0.001$ 

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

