

HL-LHC v1.6. E = 7.0 TeV.  $N_b \simeq 2.3 \times 10^{11}$  ppb,

$L_{1/5} = 2.43 \times 10^{34} \text{cm}^{-2}\text{s}^{-1}$ ,  $L_2 = 1.55 \times 10^{30} \text{cm}^{-2}\text{s}^{-1}$ ,  $L_8 = 1.55 \times 10^{33} \text{cm}^{-2}\text{s}^{-1}$

$\beta_{y,1}^* = 0.7$  m,  $\beta_{x,1}^* = 2.8$  m, polarity  $\text{IP}_{2/8} = 1/1$

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

$\sigma_z = 7.61$  cm,  $\varepsilon_n = 2.0$   $\mu\text{m}$ ,  $Q' = 15$ ,  $C^- = 0.001$

8b4e\_1972b\_1960\_1178\_1886\_224bpi\_12inj. Bunch 89.

