HL-LHC v1.6. E = 7.0 TeV.  $N_b \simeq 2.3 \times 10^{11}$  ppb,  $L_{1/5} = 2.82 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}, L_2 = 4.5 \times 10^{30} \text{ cm}^{-2} \text{ s}^{-1}, L_8 = 1.73 \times 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$  $\beta_{y=1}^* = 0.7 \text{ m}, \beta_{x=1}^* = 2.8 \text{ m}, \text{ polarity IP}_{2/8} = 1/1$  $\Phi/2_{1(H)} = 250 \mu rad, \ \Phi/2_{5(V)} = 250 \mu rad, \ \Phi/2_{2, V} = -170 \mu rad, \ \Phi/2_{8, V} = 170 \mu rad$  $\sigma_z = 7.61 \text{ cm}, \ \varepsilon_n = 2.3 \ \mu\text{m}, \ Q' = 15, \ C^- = 0.001$ 25ns 2760b 2748 2492 2574 288bpi 13inj 800ns bs200ns converted.json. Bunch 150. 62.323 -- 7.0 62.321 - 5.0 62.309 -

Octupoles Intensity (A)