

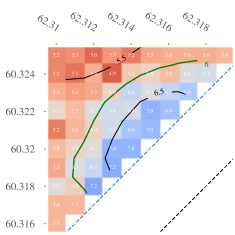
# HL-LHC v1.5. Flat optics. End of levelling.

$N_b = 1.4 \times 10^{11}$  ppb,  $\beta_{y,IP1}^* = 7.5$  cm,  $\beta_{x,IP1}^* = 18$  cm,  $\Phi/2_{IP1(H)/5(V)} = 250$   $\mu$ rad

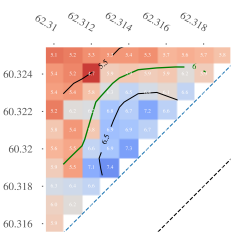
CC ON,  $\sigma_z = 7.61$  cm,  $\Phi/2_{IP8,V} = 170$   $\mu$ rad,  $\varepsilon_n = 2.5$   $\mu$ m,  $Q' = 5$ ,  $I_{MO} = 60$  A,  $C^- = 10^{-3}$

Bunches sorted by average minimum DA.

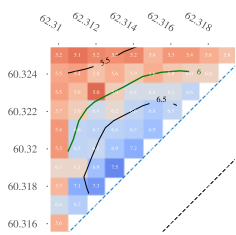
Bunch 2053



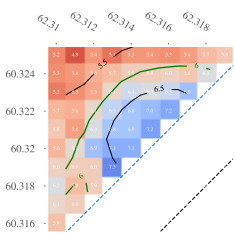
Bunch 139



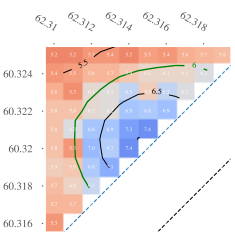
Bunch 2754



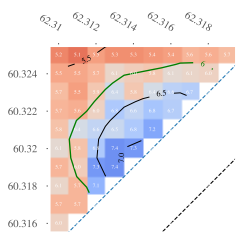
Bunch 154



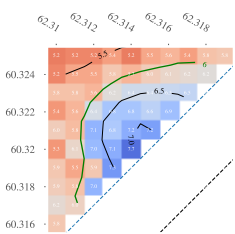
Bunch 77



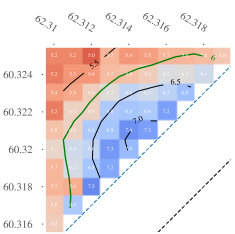
Bunch 76



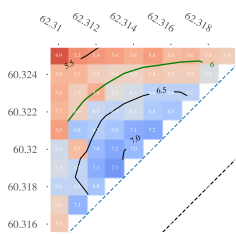
Bunch 2300



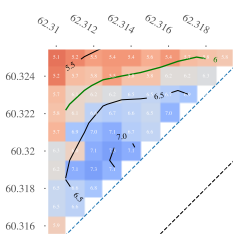
Bunch 2682



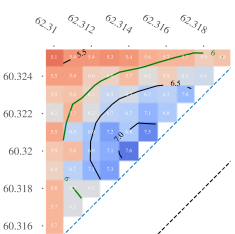
Bunch 2803



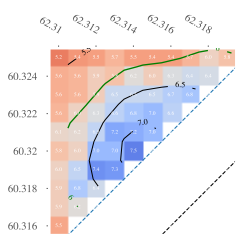
Bunch 2854



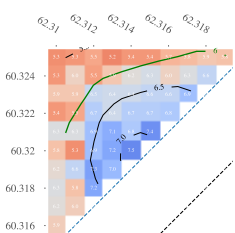
Bunch 126



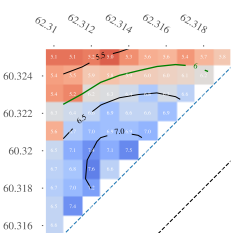
Bunch 2049



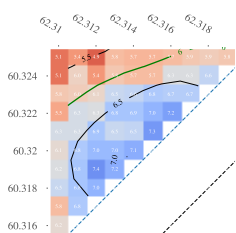
Bunch 3342



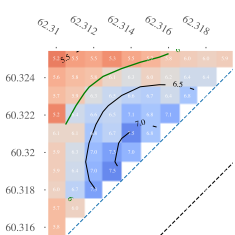
Bunch 74



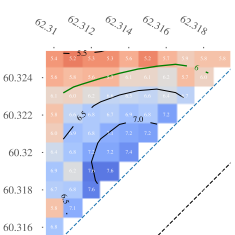
Bunch 222



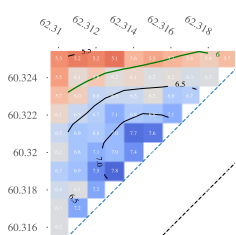
Bunch 1912



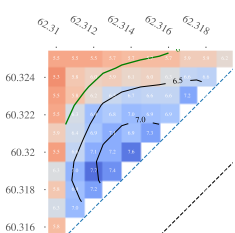
Bunch 1036



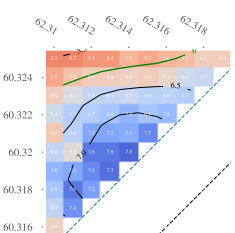
Bunch 2633



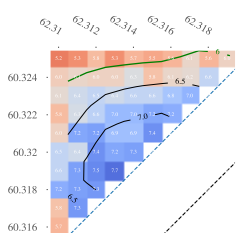
Bunch 897



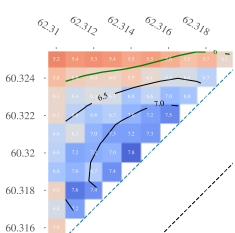
Bunch 607



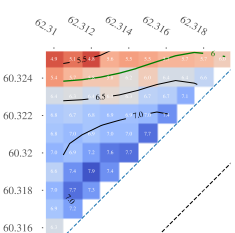
Bunch 1043



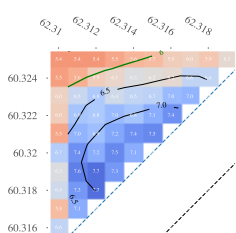
Bunch 1403



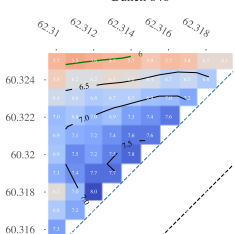
Bunch 3435



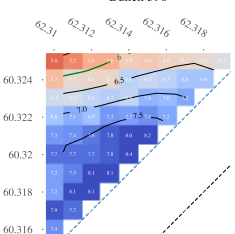
Bunch 1731



Bunch 848



Bunch 398



Bunch 942

