

The kick from an impedance is given by (3.52) in Alex' book

$$\begin{aligned}\Delta y' &= -\frac{Nr_p y_0}{2\pi\gamma} \int_{-\infty}^{\infty} d\omega \operatorname{Im}(Z_1(\omega)) |\tilde{\rho}(\omega)|^2 \\ &= -\frac{Nr_p c}{2\sqrt{\pi}\gamma\sigma_z} \frac{4\pi}{Z_0 c} y_0 \operatorname{Im} Z_{eff}\end{aligned}$$

where the impedance in the second line is given in Ω/m . The impedance on axis in the asymmetric structure is of the order $y_0 \operatorname{Im} Z_{eff} \approx 10\Omega$, from which for a single nominal LHC bunch with 30 cm rms length at 26 GeV/c we expect a kick of order 2 nrad.