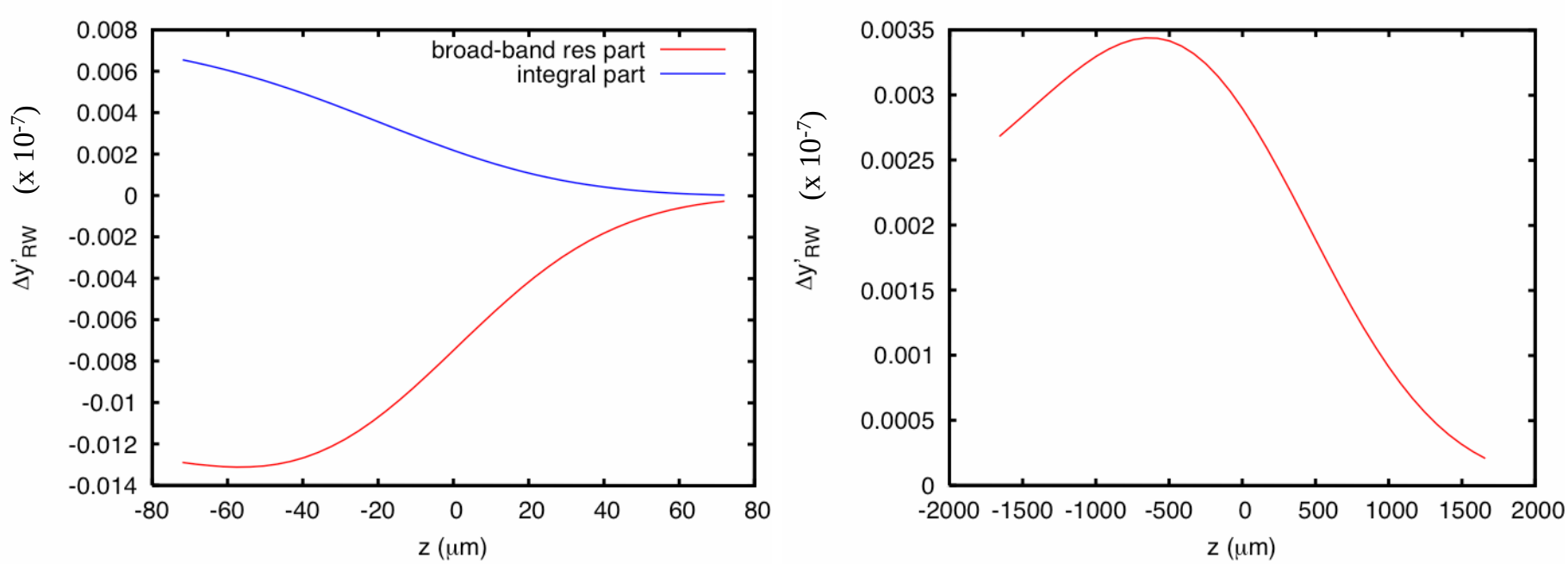
- A C-module for wake fields has been constructed and implemented in PLACET in order to allow full tracking including the collimator wake fields
- According to the parameters of the problem, the module distinguishes between different regimes for the geometric part of the wake:
  - Inductive regime
  - Intermediate regime
  - Diffractive regime

  and for the resistive wall part of the wake:
  - Short-range
  - Intermediate-range
  - Long-range

Examples of kick calculations in resistive wall wake field in the intermediate-range (left) and long-range (right) regimes.



⇒ Details of the used approach and first results from actual particle tracking through the CLIC-BDS using PLACET are in the EPAC paper:

„*Effects of wake fields in the CLIC BDS*“, G.Rumolo, A. Latina and D. Schulte

Examples of luminosity reduction curves for a nominal CLIC bunch going through the Main Linac and the BDS, with an initial vertical amplitude jitter or collimator vertical misalignment.

→ A subset of 10 collimators (those with a flat geometry, probably the most critical) from the total number of collimators planned for the CLIC linear collimation system has been considered in the simulation.