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BimBim (Beam-Beam and IMpedance)

Short description

Semi-analytical derivation of the coherent modes of oscillation based on the derivation and diagonalisation of the coherent one turn map for multiple bunches of one or two beams including the effect of the lattice (Q, Q' and Q''), the transverse feedback, head-on beam-beam interaction with a crossing angle, long-range beam-beam interactions and the transverse dipolar and quadrupolar impedance.

Web resources

- Sources
- CWG presentation

Technical information

- **Programming Languages used for implementation:**
  - Python 2.6 or higher
- **Operating systems:**
  - tested exclusivey on Linux (Ubuntu 12.04 and SLC 5)
- **Other prerequisites:**
  - Libraries: numpy, scipy

Other informations

- **Developed by :** CERN
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-- Main.XavierBuffat - 2017-10-13

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