LHC optics correction

- Goal: Correct beta-beating (to the 15% level) and dispersion-beating in LHC.
- Approach: Measurement of calibration-independent observables exciting by:
  - Single kick: FFT of BPM data
  - AC dipole: FFT of BPM data
  - Dipole correctors: Closed orbit
- Correction based on response matrix pseudo-inversion.

what are we doing?

- Simulation of correction under realistic assumptions
- Experiments in RHIC and SPS for testing
- Programming the algorithms and the GUI to be used on-line (in Python, C, Fortran and Java).
- Welcoming new collaborators!