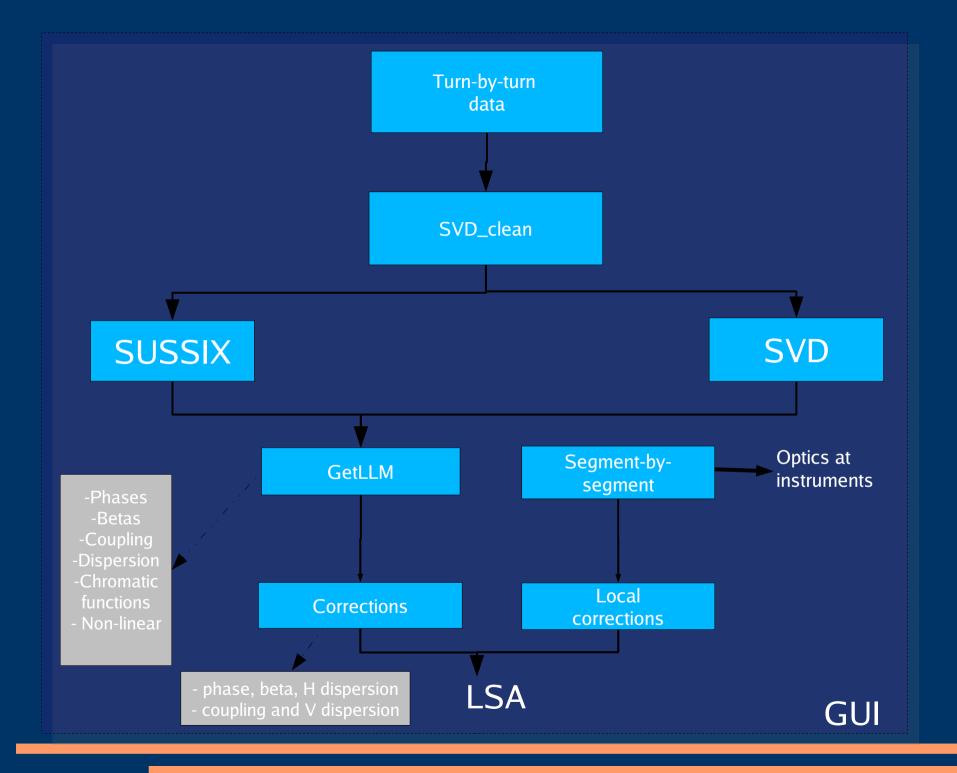# *Beta-beat code review*

## *Algorithms:*

- Running simulations to test implementation of new algorithms. (Glenn, ?)
- SVD clean: faster python script has a bug. Possibly even faster with Java. (Glenn)
- Distributing the code (Glenn), parallelization of SUSSIX (Ewen, ?)
- SVD: there are two things to do:
  - Get it up and running again for the LHC (Rama, Ryoichy, ?).
  - Coupling (Rama, Ryoichy, ?).

# *Algorithms (2)*

- Automate computation of chromatic functions. For the moment this is done manually (Glenn)
- Have a look at the non-linear functions, e.g proper implementation of phases (Glenn)
- Segment-by-Segment:
    - Write a proper filtering for BPM's (Glenn)
    - Output everything for elements: C-Matrix, angle of the beam, chromatic functions,... (Glenn)

# *Interface /GUI*

- Beta-beat:
  - Generation of model (Glenn)
  - Model improvement /PTC (Carmen, Ewen, ?)
  - Extract logged data from database, e.g tune, ac-dipole,... (Glenn)
  - Upgrading interface (Glenn):
    - Currently working on BPM panel
    - Analysis panel
    - Correction panel:
      - Finalize with tune correction
      - Model check
    - Update knob application (with new release of LSA API)

# New application

- K-modulation:
  - First step is to measure beta*.
  - Second step is to measure beta for any other quad.