

Beam Spot Monitoring and Control

STT Meeting

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General Scenario

- Beam spot parameters: beam centroid position (X_0, Y_0) and tilt in xz, yz planes (A_x, A_y)
 - At the beginning of a store:
 - * “Calibration” run, to get reference position / tilt
 - During a store:
 - * Compare current parameters to reference parameters
 - * If deviations out of range \rightarrow trigger “feedback” mechanism
- \implies Beam “stable”

Input / Output

– Input:

- * Vertex Examine → beam parameters
- * COOR / DSM / SES / ??? → run state

– Output:

- * Feedback to accelerator (?)
- * DataBase (?)
- * Controll room / SES
- * Local log file
- *

Questions

- Where does STT get reference point from, and how?
(DB (runs, trigger), EPICS, DSM, SES, COOR)
- Do we need to store stuff in DB, and if so, which?
- What is available for accelerator adjustments?
- Can reference calibration be done in first run of the store?
- . . .