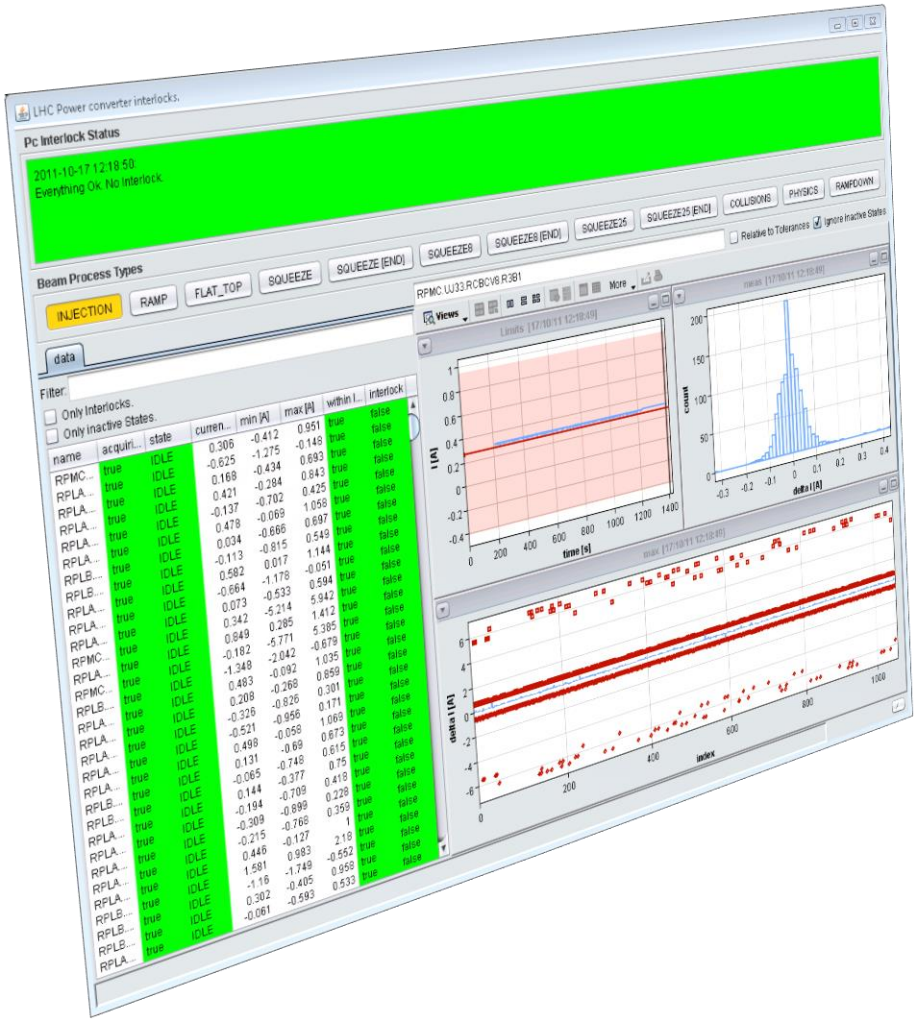
Power Converter Interlock

K. Fuchsberger

Purpose: Software interlock system to monitor power converter currents and dump the beam if they exceed certain limits to protect against operation- and feedback- failures.



Status:

- Server and GUI application in place.
- Tracking of LHC status (beam process, time within beamprocess) works.
- Acquisition & Decision-taking works.
- Configuration-management (storing tolerances in LSA + reusing GUI from YASP): in preparation.
- Currently Commissioning and Testing.

Next steps:

- More logging to establish reasonable tolerances.
- Fix some threading- and memory issues in Server.

Accelerator Testing Framework

M. Galetzka, K. Fuchsberger

Purpose: Framework to execute and track tests for accelerator systems during commissioning phases.

Status:

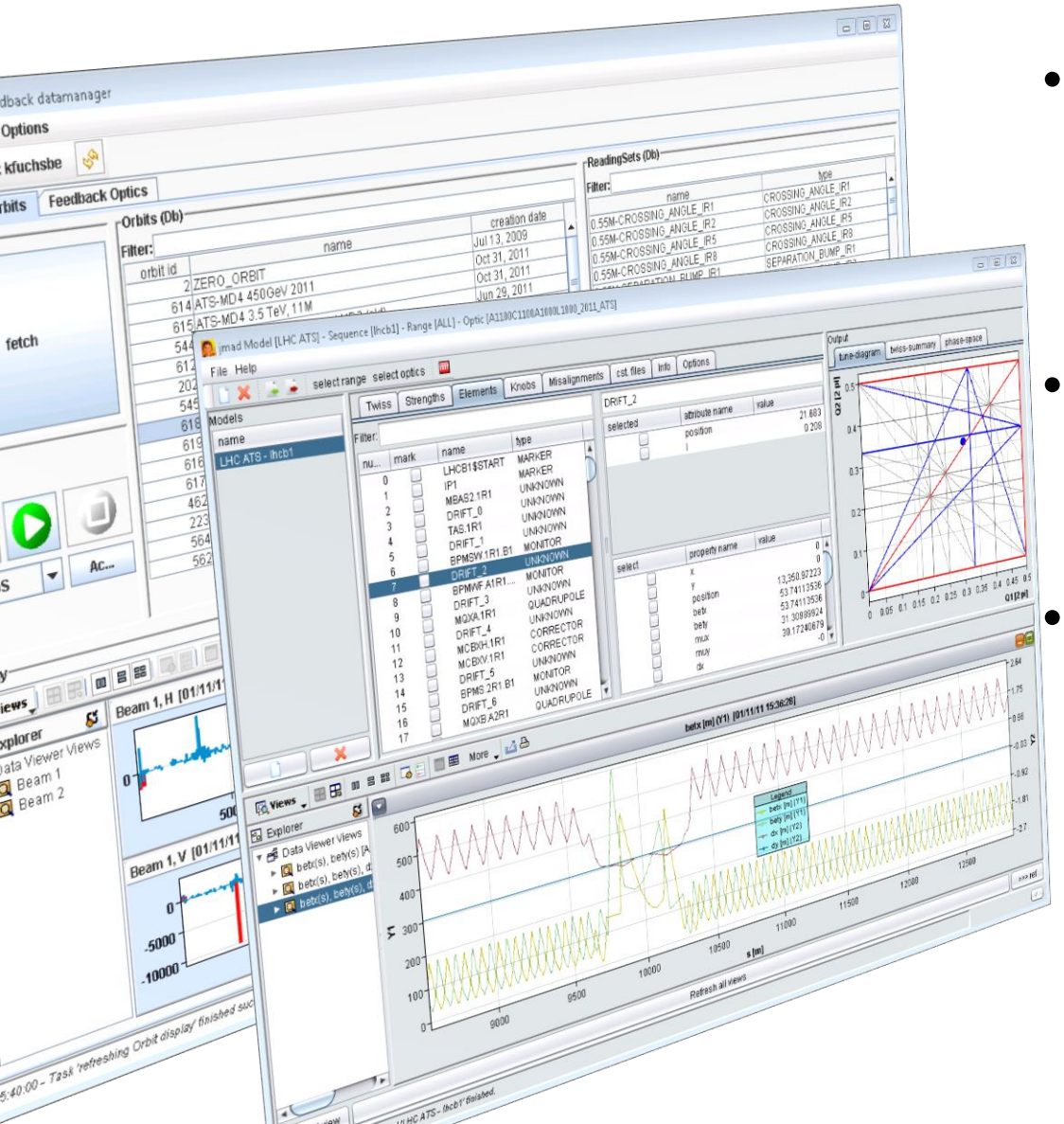
- Overall design established.
- Prototypes of Server and GUI in place.
- Display of systems and tests works (replacement for HWC GUI).
- Test plan can be displayed as graph
- Goal: Have a version with minimum required features for next commissioning campaign (after Christmas).

Ongoing:

- Integration with HWC sequencer to execute tests.
- Extend GUI to allow better filtering of tests and display more detailed information.

Collaboration with BE-OP

K. Fuchsberger



- Maintenance of Reference Orbit Management System for the LHC Orbit Feedback (GUI + Sequencer Tasks).
- Improving the automated Test Suite for the LHC Orbit Feedback System.
- Consulting and Coordinating Developments in the LHC online modeling chain related to JMad (Java API for MadX).