



7 September 2009



Collimation Phase 2 Project CERN
 Project Leader (R. Assmann)

Project Engineer for tunnel & beamline activities (O. Aberle)

Project Engineer for coll. design, lab. tests, prototyping (A. Bertarelli)

LARP/SLAC Phase 2 Collimator Work
 T. Markiewicz, SLAC

EuCARD collaboration for collimators & materials (FP7)
 R. Assmann (CERN), J. Stadlmann (GSI)

Install., maintenance, beam test support
 O. Aberle (EN/STI)

Controls, Commissioning, Operation
 S. Redaelli (BE/OP)

Remote tools
 K. Kershaw (EN/HE)

Tunnel and beamline activities (below surface)

Mechanical engineering, lab tests, prototyping, production
 A. Bertarelli (EN/MME)

Final assembly on surface
 O. Aberle (EN/STI)

Electronics, sensors, actuation
 A. Masi (EN/STI)

Vacuum issues
 M. Jimenez & V. Baglin (TE/VSC)

Dispersion suppressor changes
 J.P. Tock (TE/MSC)

Coll. design, prototyping and production (above surface)

Beam instrumentation
 B. Dehning (BE/BI)

Energy deposition
 A. Ferrari (EN/STI)

Radiation aspects
 S. Roesler (DG/SCR)

Machine protection & beam tests
 R. Schmidt (TE/MTE)

Ion loss issues
 J. Jowett (BE/ABP)

Commissioning, simulations, beam tests
 R. Assmann (BE/ABP)

Performance studies, simulations and beam tests

Crystal Collimation Tests at SPS & Tevatron

UA9: W. Scandale
 T980: N. Mokhov

participate in collaborations

Note: Phase I collimation project still active until end of system commissioning. In practice integrated with Phase III!



List of Topics I



- R. Assmann: LHC Performance model with collimation (Cassandra's talk)
- R. Assmann & A. Rossi: Collimation settings at 3.5 TeV
- R. Assmann: How to measure cleaning efficiency?
- C. Bracco: Commissioning scenarios and availability of loss data
- C. Bracco: Top level analysis of collimator data
- C. Bracco: Collimation predictions for the phase I triplet upgrade
- E. Effinger: Possibilities for gating BLM signals and what will be available (bunched/unbunched halo)
- E. Effinger: Ideas and possibilities for halo measurements with high time resolution and additional devices
- I. Efthymioupolos (tbc): Status and plans for HiRadMa
- B. Goddard et al (tbc): Requirements from beam dump and injection protection for collimation (interlock thresholds)



List of Topics II



- J. Jowett (tbc): Status of ion loss studies and collimation needs
- Y.I. Levinsen: Simulation of beam-gas scattering in sixtrack and resulting loss maps
- L. Lari, FLUKA: FLUKA studies for phase 2
- T. Markiewicz & R. Assmann: Acceptance criteria for the SLAC phase II collimator prototype
- A. Nordt: View on BLM usage during collimator commissioning
- V. Previtalli (tbc): SPS crystal predictions and data
- V. Previtalli (tbc): Simulations of crystal-enhanced collimation for LHC
- S. Redaelli: Final implementation of RBAC, discussion with inj and lbd teams
- S. Redaelli: Machine protection procedure for collimators
- S. Roesler: Special collimation-related RP issues during startup
- F. Roncarollo: TCL simulations



List of Topics III



- A. Rossi: Status of unified sixtrack with collimation code
- A. Rossi: Status of collimation simulations for 3.5 TeV
- A. Rossi: Loss maps for background studies
- A. Rossi: Summary of MTF status
- C. Zamantzas: Status of fast BLM-based collimator positioning
- L. Tlustos: Medipix detector for the LHC?
- D. Wollmann: Access to collimator data in the database
- FLUKA: IR3 energy deposition
- FLUKA: Energy deposition with an imperfect LHC
- FLUKA: Energy deposition at intermediate energies
- FLUKA: Energy deposition with intermediate collimator settings
- FLUKA: Phase I triplet upgrade



List of Topics IV



- tbd: Plans for Phase 2 prototype tests with SPS beam
- tbd: SPS MD results and plans
- tbd: Status of off-momentum halo simulations