

Review on PS Booster with Linac4

Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome address

Thursday 15 January 2009 09:00 (10 minutes)

Presenter: EVANS, Lyn (CERN)

Contribution ID: 1

Type: **not specified**

Linac4 Project

Thursday 15 January 2009 09:10 (25 minutes)

Overview of the Linac4 project

Presenter: VRETENAR, Maurizio (CERN)

Contribution ID: 2

Type: **not specified**

Operational Scenarios within the Complex

Thursday 15 January 2009 09:35 (30 minutes)

- Versatility of the (present) machine (to be maintained)
- Generation of “exotic” beams (some thoughts on machine activation?)
- Transfer of LHC type (and other) beams to the PS

Presenter: MIKULEC, Bettina (CERN)

Contribution ID: 3

Type: **not specified**

Linac4 Beam Characteristics

Thursday 15 January 2009 10:05 (30 minutes)

- Generation of energy modulation
- Beam characteristics to be expected around the PSB injection (distribution region up to injection point)
- Tunability, uncertainties

Presenter: LOMBARDI, Alessandra (CERN)

Contribution ID: 4

Type: **not specified**

PS Booster beam dynamics with L4

Thursday 15 January 2009 11:00 (45 minutes)

- Longitudinal painting
- Simulation of beams with strong direct space charge forces,
- Limitations due to H- injection hardware,
- Planned studies (investigations on feasibility of collimation)

Presenter: CARLI, Christian (CERN)

Contribution ID: 5

Type: **not specified**

Upgrade of distribution and injection region

Thursday 15 January 2009 11:45 (45 minutes)

- Layout, apertures magnets of the distributor region
- Layout, apertures, magnets and vacuum aspects of the injection region
- Foil handling mechanism
- Environment seen by the beam (BS inside/outside vacuum, shielding of cavities created ..)

Presenter: WETERINGS, Wim (CERN)

Contribution ID: 6

Type: **not specified**

Operational aspects and maintenance of the injection region

Thursday 15 January 2009 14:00 (30 minutes)

- Transverse painting and aperture aspects, impact of injection failures on foil
- Foil exchange procedures (activation, time ...)
- Control of injection losses and beam dump
- Specific instrumentation

Presenter: Dr GODDARD, Brennan (CERN)

Contribution ID: 7

Type: **not specified**

Commissioning of the PSB with Linac4

Thursday 15 January 2009 14:30 (45 minutes)

- Commissioning strategies
- Milestones
- Possible difficulties and cures (use of instrumentation)

Presenter: Dr HANKE, Klaus (CERN)

Contribution ID: 8

Type: **not specified**

RF aspects and possible limitations

Thursday 15 January 2009 15:15 (30 minutes)

- Instabilities with higher intensities
- Beam loading problem at present with C04 cavities
- Future low RF level system (communication with Linac4 for chopping)

Presenter: BLAS, Alfred (CERN)