

# **HL-LHC / LIU Joint Workshop**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## **Summary and outcome of the 1st LIU-HL-LHC Brainstorming meeting**

*Friday 30 March 2012 09:05 (20 minutes)*

**Presenter:** LAMONT, Mike (CERN)

Contribution ID: 1

Type: **not specified**

## **Transverse emittance blow-up and beam loss between injection and collision –20+10 minutes**

*Friday 30 March 2012 09:25 (30 minutes)*

- o Taking into account experience with beam until end of 2011
- o For 25 and 50 ns bunch spacing

**Presenter:** KAIN, Verena (CERN)

**Session Classification:** HL-LHC Talks

Contribution ID: 2

Type: **not specified**

## **Update of required beam characteristics at injection energy in LHC –20+10 minutes**

*Friday 30 March 2012 09:55 (30 minutes)*

- o Taking into account experience with beam until end of 2011
- o For 25 and 50 ns bunch spacing
- o Known “hard” and “soft” limits and resulting area of beam characteristics

**Presenter:** BRUNING, Oliver (CERN)

**Session Classification:** HL-LHC Talks

Contribution ID: 3

Type: **not specified**

## **Micro-batch filling scheme for pacman cancellation –10+5 minutes**

*Friday 30 March 2012 10:25 (15 minutes)*

**Presenter:** FARTOUKH, Stephane (CERN)

**Session Classification:** HL-LHC Talks

Contribution ID: 4

Type: **not specified**

## **New ideas (e.g. pile-up levelling versus luminosity levelling schemes: potential gains and losses in performance) –10+5 minutes**

*Friday 30 March 2012 10:40 (15 minutes)*

**Presenter:** Dr ZIMMERMANN, Frank (CERN)

**Session Classification:** HL-LHC Talks

Contribution ID: 5

Type: **not specified**

## **Analysis of performance progress in the injectors in 2011 –20+10 minutes**

*Friday 30 March 2012 11:10 (30 minutes)*

- o Double PSB batch in the PS
- o SPS improvement because of scrubbing?
- o What was done in MDs
- o Instrumentation-related issues

**Presenter:** RUMOLO, Giovanni (CERN)

**Session Classification:** LIU talks

Contribution ID: 6

Type: **not specified**

## **Update of achievable beam characteristics at injection in LHC –20+10 minutes**

*Friday 30 March 2012 11:40 (30 minutes)*

- o Taking into account experience with beam until end of 2011
- o For 25 and 50 ns bunch spacing
- o Known “hard” and “soft” limits
- o Suggesting area of equivalent beam characteristics.

**Presenter:** Dr GODDARD, Brennan (CERN)

**Session Classification:** LIU talks



Contribution ID: 7

Type: **not specified**

## About beam characteristics and LHC luminosity ...— 20+10 minutes

*Friday 30 March 2012 12:10 (30 minutes)*

- Luminosity and beam quality factor
- Status
- How space charge bottlenecks are addressed
- Could we do better?
- Path to the specifications of the LIU goals

**Presenter:** GAROBY, Roland (CERN)

**Session Classification:** LIU talks

Contribution ID: 8

Type: **not specified**

## **Pros-cons of 25 ns vs 50 ns, animated by J-M. Jimenez and E. Metral.**

*Friday 30 March 2012 14:00 (1 hour)*

**Session Classification:** Questions with one “moderator”/ question, and a 1 slide introduction for each project

Contribution ID: 9

Type: **not specified**

## **Overlapping LIU accessible beam parameters (areas) with LHC beam parameters regions (bands), animated by S. Gilardoni and G. Arduini.**

*Friday 30 March 2012 15:00 (1 hour)*

**Session Classification:** Questions with one “moderator”/ question, and a 1 slide introduction for each project

Contribution ID: **10**

Type: **not specified**

**List of questions to be answered by the end of 2012 /  
required MDs, animated by E. Shaposhnikova and R.  
Assmann.**

*Friday 30 March 2012 16:15 (1 hour)*

**Session Classification:** Questions with one “moderator”/ question, and a 1 slide introduction for each project

Contribution ID: **11**

Type: **not specified**

## Welcome

*Friday 30 March 2012 09:00 (5 minutes)*

**Presenter:** MYERS, Steve (CERN)