

# **LHC Beam Dump System Review and its readiness for the Run3 and HL-LHC operation**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## LBDS: setting the scenes

*Tuesday 5 February 2019 08:45 (25 minutes)*

- a) Existing design: kickers, protection elements, controls logic, BETS, considered failures and failure rates etc.
- b) Operation during past runs: reliability, new failures (impact on beam and protection elements) and mitigations applied up to now (generator cleaning, radiation shielding).
- c) Possible limitations for Run III.
- d) New requests (additional kickers or separate vacuum tanks) and expected performance.

**Presenter:** BRACCO, Chiara (CERN)

Contribution ID: 2

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 09:10 (5 minutes)*

Contribution ID: 3

Type: **not specified**

## LBDS kickers: HW upgrade

*Tuesday 5 February 2019 09:15 (20 minutes)*

- a) Actions foreseen during LS2 and present status (switch consolidation, grounding)
- b) additional MKBs or other solutions to be investigated (separate vacuum tank) with technical details.

When possible applying first mitigations? Latest date to start production.

**Presenters:** DUCIMETIERE, Laurent Sylvain (CERN); SENAJ, Viliam (CERN)

Contribution ID: 4

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 09:35 (5 minutes)*

Contribution ID: 5

Type: **not specified**

## LBDS kickers: controls upgrade

*Tuesday 5 February 2019 09:40 (20 minutes)*

- a) Upgrade foreseen during LS2 (MKB re-triggering, IPOC upgrade, sparking surveillance, etc.)
- b) Actions foreseen for LS3 (what is in the baseline: Triggering synchronization distribution, powering etc.)
- c) What is not in the baseline and might be needed (replacement of aging equipment, etc. consolidation? Operational budget?)

**Presenters:** CARLIER, Etienne (CERN); MAGNIN, Nicolas (CERN)

Contribution ID: 6

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 10:00 (5 minutes)*

Contribution ID: 7

Type: **not specified**

## **Return of experience from Run II operation and Implications for Run III and HL-LHC**

*Tuesday 5 February 2019 10:30 (30 minutes)*

- a) Review of existing design, design choices, etc.
- b) Operation during run II: vibrations, leaks.
- C) actions foreseen during LS2 and actions from the past (N2 bottle on surface, design and construction of new back windows, decision on gaskets, etc..) .

**Presenter:** PERILLO MARCONE, Antonio (CERN)



Contribution ID: 8

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 11:00 (5 minutes)*

Contribution ID: 9

Type: **not specified**

## **Energy deposition and accident scenarios, RunII, RunIII and HL-LHC¶**

*Tuesday 5 February 2019 11:05 (25 minutes)*

- a) worst accidental design scenario known until and post RunII, worst design accidental scenario for the future.
- b) Run III operational scenarios.

**Presenter:** LECHNER, Anton (CERN)

Contribution ID: **10**

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 11:30 (5 minutes)*

Contribution ID: **11**

Type: **not specified**

## **Thermal and structural simulations of Core and windows**

*Tuesday 5 February 2019 11:35 (25 minutes)*

How we study the problem, why the windows are an issue, why the core might be an issue, what are the missing information in terms of properties, what is the dominating problem, severity of different failure scenarios on the core, etc...

**Presenter:** POLZIN, Tobias (CERN)

Contribution ID: **12**

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 12:00 (5 minutes)*

Contribution ID: 13

Type: **not specified**

## TCDS/TCDD for Run III and HL-LHC

*Tuesday 5 February 2019 13:30 (15 minutes)*

**Presenter:** NUIRY, Francois-Xavier (CERN)

Contribution ID: **14**

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 13:45 (5 minutes)*

Contribution ID: 15

Type: **not specified**

## Status of material properties and testing at CERN

*Tuesday 5 February 2019 13:50 (20 minutes)*

Material properties needed to assess the core performances, tests done @ CERN, tests to be done outside.

**Presenter:** GUINCHARD, Michael (CERN)



Contribution ID: **16**

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 14:10 (5 minutes)*

Contribution ID: 17

Type: **not specified**

## TDE upgrade needs and future prospects for HL-LHC

*Tuesday 5 February 2019 14:15 (20 minutes)*

- a) current collaboration and activities for further decision (core, windows)
- b) plan for the future and possible options.
- c) decision points and how we decide.
- d) problems to be solved and how we would proceed (new gaskets, new core, damping system, eventual staged upgrade during run III).

**Presenter:** CALVIANI, Marco (CERN)

Contribution ID: **18**

Type: **not specified**

## Q&A

*Tuesday 5 February 2019 14:35 (5 minutes)*

Contribution ID: **19**

Type: **not specified**

**Close out**

Contribution ID: **20**

Type: **not specified**

## Welcome and Introduction

*Tuesday 5 February 2019 08:30 (15 minutes)*

Contribution ID: **21**

Type: **not specified**

## Questions

*Tuesday 5 February 2019 14:40 (1 hour)*