

# **HL-LHC Circuit Instrumentation Review**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Introduction to the Review

*Tuesday 1 September 2020 10:00 (10 minutes)*

**Presenter:** ZERLAUTH, Markus (CERN)

Contribution ID: 2

Type: **not specified**

## Recall on Protection Strategies for the Different Circuits

*Tuesday 1 September 2020 10:10 (30 minutes)*

Setting the scene: how to protect the different s.c. elements and materials of each circuit, requirements from the different circuit elements, general overview, references to other reviews, simulations and prior experimental validations

**Presenter:** WOLLMANN, Daniel (CERN)

Contribution ID: 3

Type: **not specified**

## Quench Detection

*Tuesday 1 September 2020 10:40 (30 minutes)*

(detection schemes, instrumentation to meet the requirements,  
detection on each s.c. element in the circuit, protection vs monitoring of splices, redundancy and  
mitigation in case of  
instrumentation failures, etc)

**Presenter:** DENZ, Reiner (CERN)

Contribution ID: 4

Type: **not specified**

## Instrumentation Feedthrough Systems for WP3

*Tuesday 1 September 2020 11:10 (30 minutes)*

specifications, how to meet requirements (tightness, insulation, etc), what is planned in terms of procurement, tables of different variants at present and how to match using the flanges variants. Delivery planning with respect to requirements.

**Presenter:** SCHEUERLEIN, Christian (CERN)

Contribution ID: 5

Type: **not specified**

## Instrumentation Feedthrough Systems for WP6a

*Tuesday 1 September 2020 11:40 (30 minutes)*

specifications, how to meet requirements (tightness, insulation, etc), what is planned in terms of procurement, tables of different variants at present and how to match using the flanges variants. Delivery planning with respect to requirements.

**Presenter:** FLEITER, Jerome (CERN)

Contribution ID: 6

Type: **not specified**

## Overview of IFS Boxes

*Tuesday 1 September 2020 12:10 (20 minutes)*

(requirements, solutions to be applied)

**Presenter:** D'ANGELO, Giorgio (CERN)

Contribution ID: 7

Type: **not specified**

## Monitoring of Splices for WP3

*Tuesday 1 September 2020 14:00 (25 minutes)*

(introduction to the splice types, risks associated in case of failure, achievable accuracy for splice monitoring with UQDS, should each single splice be equipped with taps: why or why not)

**Presenter:** SCHEUERLEIN, Christian (CERN)



Contribution ID: **8**

Type: **not specified**

## **Monitoring of Spices for WP6a**

*Tuesday 1 September 2020 14:25 (25 minutes)*

(introduction to the splice types, risks associated in case of failure, achievable accuracy for splice monitoring with UQDS, should each single splice be equipped with taps: why or why not)

**Presenter:** FLEITER, Jerome (CERN)

Contribution ID: 9

Type: **not specified**

## **Experience and Findings with Instrumentation Feedthrough Systems during Commissioning and LHC Operation**

*Tuesday 1 September 2020 14:50 (25 minutes)*

Statistics on how many V-taps and feedthroughs lost, failure modes and mitigations, benefits of instrumentation during construction, commissioning and operation.

**Presenter:** BEDNAREK, Mateusz Jakub (CERN)

Contribution ID: **10**

Type: **not specified**

## **Instrumentation other than Voltage Taps, Machine Configuration versus Test-stand Configurations – Overview WP3**

*Tuesday 1 September 2020 15:35 (20 minutes)*

**Presenter:** PRIN, Herve (CERN)

Contribution ID: 11

Type: **not specified**

## **Instrumentation other than Voltage Taps, Machine Configuration versus Test-stand Configurations – Overview WP6a**

*Tuesday 1 September 2020 15:15 (20 minutes)*

**Presenter:** FLEITER, Jerome (CERN)

Contribution ID: 12

Type: **not specified**

## Instrumentation Wires

*Tuesday 1 September 2020 15:55 (25 minutes)*

Types, specifications and qualification.

Delivery planning with respect to requirements.

**Presenter:** SCHEUERLEIN, Christian (CERN)

Contribution ID: 13

Type: **not specified**

## Wrap-up Discussion

*Tuesday 1 September 2020 16:20 (10 minutes)*

**Presenter:** ALL PARTICIPANTS

Contribution ID: **14**

Type: **not specified**

## **Close Session**

*Tuesday 1 September 2020 16:30 (1 hour)*

**Presenter:** PANEL

Contribution ID: 15

Type: **not specified**

## **Close Out (held on 15/09/2020-15h30)**

*Tuesday 1 September 2020 17:30 (15 minutes)*

**Presenter:** ZERLAUTH, Markus (CERN)