

## Wrap-up session – Day 2

A. Henriques

Cryogenic Safety – HSE Seminar 22<sup>nd</sup> September 2016 CERN

## Day 2 – Questions ??

Pressure relief protection in cryostats: CERN's experience on LHC and HIE Isolde	Vittorio Parma et al.
503-1-001 - Council Chamber, CERN	08:40 - 09:10
Safety aspects of superconducting magnets for Super-FRS	Hans Guenter Mueller et al.
503-1-001 - Council Chamber, CERN	09:10 - 09:30
Block 4 and Cluster D - Safety	Vladislav Benda
503-1-001 - Council Chamber, CERN	09:30 - 09:50
Cryogenic safety of the superconducting ALPI accelerator at INFN-LNL	Ruggero Pengo
503-1-001 - Council Chamber, CERN	09:50 - 10:10
Coffee Break	
503-1-001 - Council Chamber, CERN	10:10 - 10:35
Cryogenic Safety Rules and Guidelines at CERN	Simon Marsh
503-1-001 - Council Chamber, CERN	10:35 - 10:55
ISO and EIGA standards for cryogenic vessels and accessories	Hervé BARTHELEMY
503-1-001 - Council Chamber, CERN	10:55 - 11:25
CRAB cavity project – Mechanical design and safety	Luca Dassa
503-1-001 - Council Chamber, CERN	11:25 - 11:45
Strategy for conformity of non-standard cryogenic equipment	Carlos Arregui Rementeria et al.
503-1-001 - Council Chamber, CERN	11:45 - 12:05
Mechanical Designs for Relief Valves for Cryogenic Apparatuses and Installations	Fridolin Holdener
503-1-001 - Council Chamber, CERN	12:05 - 12:25

Safety in Cryogenics – Safety device sizing	Mr. Eric Ercolani et al.
503-1-001 - Council Chamber, CERN	14:00 - 14:20
Investigation of Two-Phase Flow in Cryogenic Pressure Relief Devices	Christina Weber et al.
503-1-001 - Council Chamber, CERN	14:20 - 14:40
Sizing of safety valves for multi-phase flow - ISO 4126 and state of knowledge	Jürgen Schmidt
503-1-001 - Council Chamber, CERN	14:40 - 15:00
Numerical study of saturation steam/water mixture flow and flashing initial sub-cooled water flow inside throttling devices	w QUANG Dang Le et al.
The numerical evaluation of the minimal outlet area of the safety valve in the pipelines of cryogenic installations	Dr. Ziemowit Malecha et al.
Coffee Break	
503-1-001 - Council Chamber, CERN	15:40 - 16:05
Investigation of the cold process pipe rupture mechanism	Maciej Dziewiecki et al.
503-1-001 - Council Chamber, CERN	16:05 - 16:25
Risk assessment of cryogenic installations – implementation, applicability of methodologies and challenges at CERN	Carlos Arregui Rementeria
Risk Assessment tailored to cryogenics - LINDE approach	Stefan Rath
503-1-001 - Council Chamber, CERN	16:45 - 17:25
Application of risk-based inspection methods for cryogenic equipment	Simon Marsh
503-1-001 - Council Chamber, CERN	17:25 - 17:45



9/29/2016

#### **Visits**

- Friday morning 23<sup>rd</sup> September
- Only open due external participants
- Visit Points
  - ATLAS experiment (surface installations)
  - Synchrocyclotron
  - CryoLab
  - SM18 exhibition
  - CCC 'CERN Control Center'

### **Visits**

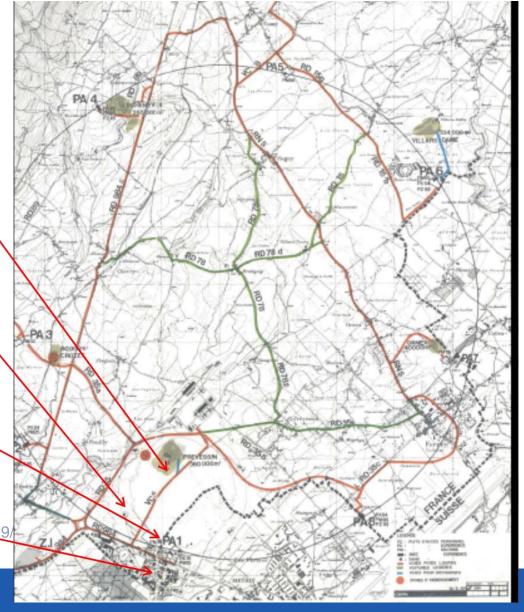
The flyer is available in INDICO:

https://indico.cern.ch/ event/495194/attach ments/1255666/1983 836/TOUR\_for\_HSE \_Seminar.pdf **Laboratory 2: CCC** 

**SM18** 

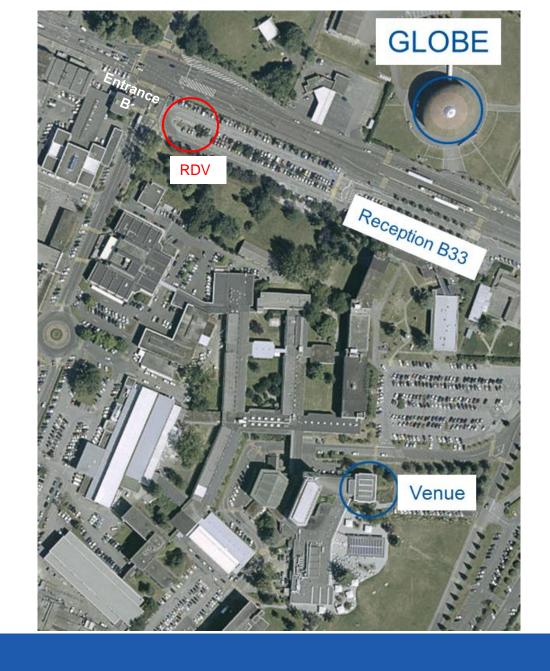
**LHC Point 1: ATLAS** 

Synchrocyclotron CryoLab



### **Visits**

- RDV point is by Entrance B just outside CERN near the flags @ 8h
- Bring your conference badge with the respective colour code (green or red)



9/29/2016

## Visits - Safety

#### Recommendations to be strictly followed:

- CERN installations are located on both sides of the French/Swiss border. Therefore you should ensure that you have your passport and any other relevant documentation with you.
- The visitors are requested to be in front of the buses located in the Parking des Drapeaux (near Entrance B (outside CERN's entrance where the flags are) at 08:00 a.m. (Friday 23rd September) – Please be on TIME.
- There will be one <u>person responsible for each bus</u> (check your colour code on your badge):
  R. Decreuse for the green bus (Phone: +41 754111093) and A. Henriques for the <u>red</u> bus (Phone: +41 754119774)
- Wear suitable shoes (no high heels, no open shoes or open sandals) for safety reasons
- Please respect the TIMETABLE.

#### **ENJOY YOUR VISIT!**

# A part from the seminar...











