

# SM18 Testing

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- **SM18 Testing of PoP Cavities**
  - **DQW: Next cavity to be tested**
    - **Installation date depends on:**
      - Is HPR needed? SM18 HPR not available for 2 weeks
      - Fixed or mobile power coupler ...
      - Modification of insert ... move to standard infrastructure
  - **RFD**
    - Do we have expected arrival date, and is HPR required
    - Test before HL-LHC meeting ?
  - **UK4R:**
    - Radiology then repair of beam port flanges: re-test in 2105
- **SM18 Testing: input for LLRF**
  - Need to start discussion on what is required for quench studies and noise test => Philippe.

# SPS: Integration

- Integration repository established
  - Repository of 3D-models for integration study
    - Managed by integration office
    - Based on 2017 description of SPS.

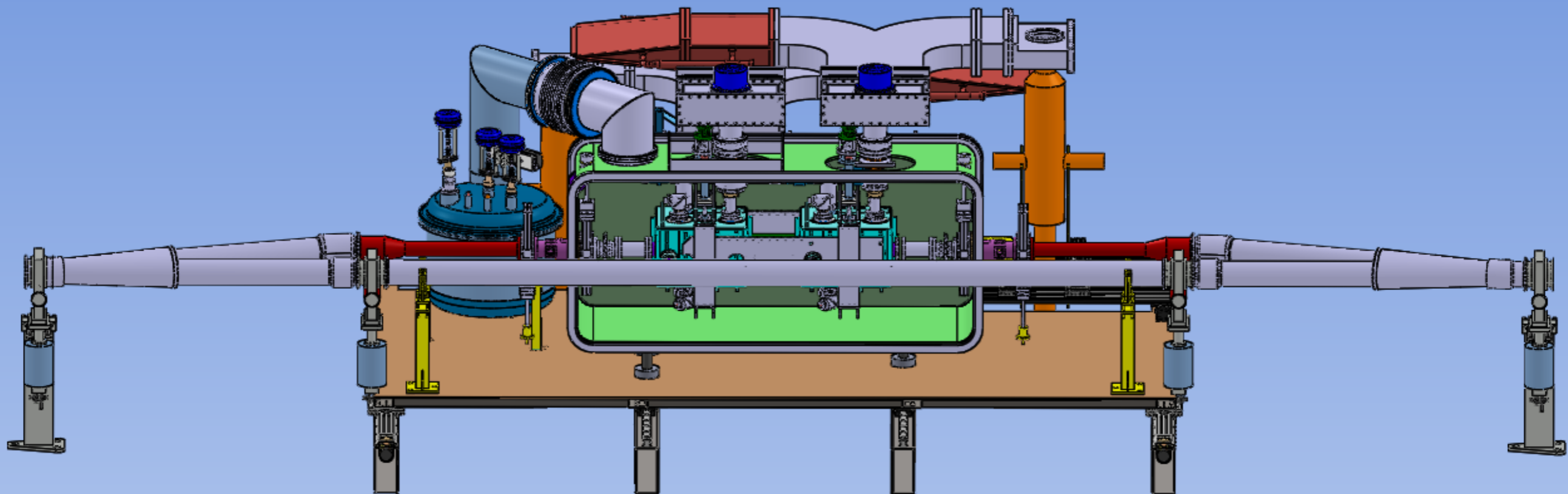
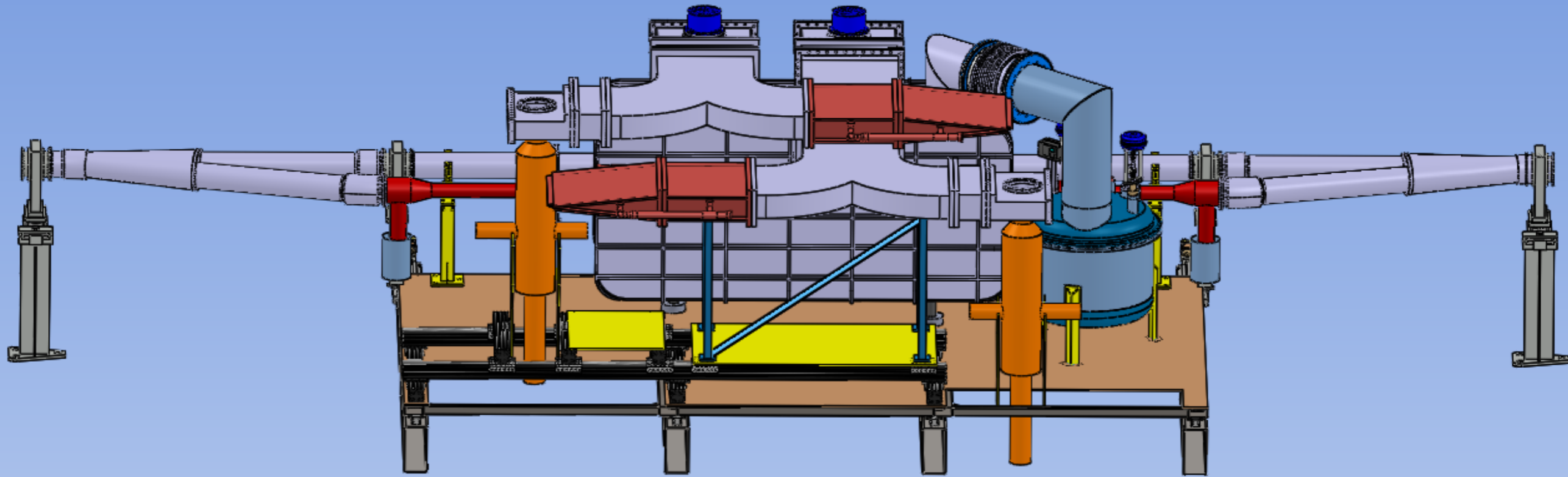
Equipement	Responsible	Designer	Smarteam Reference	Designed by			State			Checked on	Note
				Integration	Other (step, cgr...)	official section	Not existing	to be modified	good		
Chemins Cables LSS4 - 2017	EN-EL	Galleazzi / Kosmicki	ST0520632_02								Certains Supports CC à raccourcir
Cryomodule - BNL		R. Leuxe									
Cryomodule - ODU		R. Leuxe									
Cryoservice Module - Detailed		T. Capelli	ST0593839_01								
Cold Box											
Helium pumps	TE-CRG	Galleazzi / Kosmicki	STxxxxxxx_01								Positions Pompes à vérifier
Dewar	TE-CRG										
Evapourator	TE-CRG										
Nitrogen Distribution	TE-CRG										
Transfer lines - Dewar to Service Module	TE-CRG										
RF Circulator	BE-RF	AFT Microwave									Only technical drawings provided (3D Approximations)
RF Load	BE-RF	AFT Microwave									Only technical drawings provided (3D Approximations). Pyramid se
Tetrode/Amplifier	BE-RF										
Button BPM	BE-BI	C. Menot									CDD Reference - LHCBPMWI0001
Y-Chamber	TE-VSC	J. Ferreira									
Cryotrap/NEG Section	TE-VSC	J. Ferreira									
Beam Pipe Transition	TE-VSC	J. Ferreira									
By-Pass Pipe	TE-VSC	J. Ferreira									
Cryomodule Support Table		P Kardopoulos									
Cabling ECA4											
Rack Layout ECA4											ECA4 Control Room on Level -2: LLRF Racks as close as possible to s

# Integration

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- **Definition of interfaces and terms of reference for cryo modules + cryo**
  - Initial discussion with Teddy (<https://edms.cern.ch/document/1360083/1>)
- **Beam pipe and Y-chamber design**
  - Impedance design done. Vacuum group starting on mechanical design in October
- **Vacuum conditions and valve layout**
  - Cold trap vs NEG study now launched with vacuum group
- **BPMs**
  - Identified BPM model LHCBPMWI as suitable and 2 are available
- **Cabling requirements**
  - Need input from cryo, power and LLRF
- **Control room space**
  - Provisionally allocated space in ECA4 level -2
    - up to 7 racks in control room area + racks on passage way close to shielding wall

# Support Table



# Schedule + other concerns

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- **Cryo**

- Main concern: installation of new cold box
  - Overloads schedule during Christmas breaks
- Also need to understand conceptual design transfer lines to cryo module

- **Schedule**

- Present schedule is out of date =>Needs input from all
- From presentation at IEFC, I have now been asked to evaluate different installation scenarios, so to decide on overall implications of SPS planing.  
Scenarios to include
  - COLDEX removal ( in 2015 or 2016 Xmas break)
  - Installation of Infrastructure and support table in LSS4 alcove
  - Installation in ECA4 and BA4
  - Replacement of cold box

- **SPS MDs**

- Need