
FDR Walkthrough

Resources

- OEC Sandbox
 - <https://indico.cern.ch/event/1393802/>
- GM&I Sandbox
 - <https://indico.cern.ch/event/1405397/>

GM&I FDR SANDBOX: Session #1

TUESDAY, 14 MAY  **Restricted**  Europe/Zurich  T. Jones

14:00 → 14:15	Introduction to Review and Replies on general Items to PDR Report	⌚ 15m	
0:10 talk + 0:05 questions			
14:15 → 14:45	OEC Introduction, Replies to PDR Report & Main Design Changes	⌚ 30m	
00:20 talk + 00:10 questions			
Speaker: Tim Jones (University of Liverpool (GB))			
14:45 → 15:35	OEC Design & Manufacturing	⌚ 50m	
Presentations (30') + Questions (20')			
Global Mechanical Structures			
Design & manufacture of Global Mechanical Structures			
Speaker: John Carroll			
Type-1 Cooling Interconnect			
Description of thermo-fluidic design & implementation of Type-1 Cooling Interconnect			
Speaker: Simone Coelli (Università degli Studi e INFN Milano (IT))			
Type-1 Electrical Services			
Design and implementation of Type-1 Power and Type-1 Data cabling			
Speaker: Stephan Eisenhardt (The University of Edinburgh (GB))			
15:35 → 15:50	Afternoon break	⌚ 15m	

GM&I FDR SANDBOX: Session #2

15:35 → 15:50 Afternoon break Restricted Europe/Zurich I. Jones 15m

15:50 → 16:40 **OEC Design Validation & Performance**

Presentations (30') + Questions (20')

Half-cylinder Prototyping

Experience from the assembly of a L4 prototype half-cylinder

Speaker: James Coleman-Mills

Thermo-fluidic Testing

Results from work (full L4, one-loop L2 and L3) at BabyDEMO

Speaker: Sonia Carra (Università degli Studi e INFN Milano (IT))

Global Mechanical FEA Studies

Expected deformation & stability of Outer Pixel Endcap

Speaker: Mauro Monti (Università degli Studi e INFN Milano (IT))

16:40 → 17:30 **OEC Integration**

Presentations (30') + Questions (20')

OEC Integration & Test

Integration tooling. Integration & test of services. Integration & test of half rings. Half-cylinder mating & test

Speaker: Marianna Testa (INFN e Laboratori Nazionali di Frascati (IT))

Welding During Integration

Geometrical issues, welding & re-work

Speaker: Paul Neil Kemp-Russell (University of Sheffield (GB))

17:30 → 18:00 **OEC planning**

Presentation (20') + Questions (10')

Overview of OEC Integration scheduling. Plans for PRRs. Procurement.

Speaker: Helen Hayward (University of Liverpool (GB))

Session #1

- OEC Introduction, replies to PDR & main design changes
 - https://indico.cern.ch/event/1393802/contributions/5858841/attachments/2817637/4989266/1_Introduction_070524.pdf
- OEC Design & Manufacturing (3x10' + 20')
 - GM Structures – John
 - Type-1 Cooling – Simone
 - Type-1 Electrical – Stephan

Session #2

- OEC Design Validation & Prototyping (3x10' + 20')
 - Half-cylinder Prototyping – James
 - Thermo-fluidic Testing – Sonia
 - Global Mechanical FEA - Mauro
- OEC Integration (20'+10' + 20')
 - OEC Integration & Test – Marianna (20')
 - Welding During Integration – Paul (10')
- OEC Planning (20' + 10')
 - Overview of OEC Integration Schedule, PRRs & Procurement - Helen