



HIE-ISOLDE Project Status Report

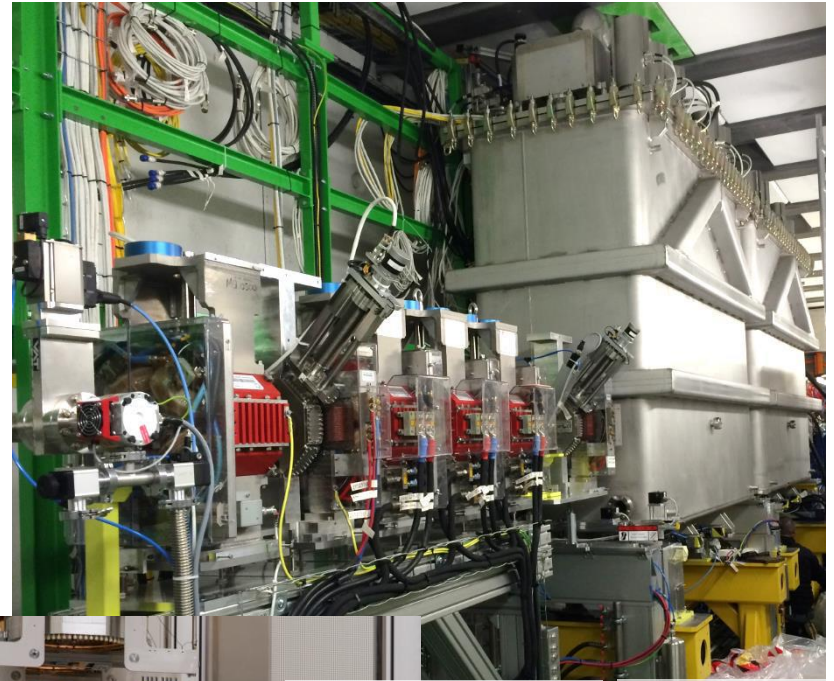
Y. KADI
for the HIE-ISOLDE Project Team

53rd INTC Meeting
CERN, 29 June 2016

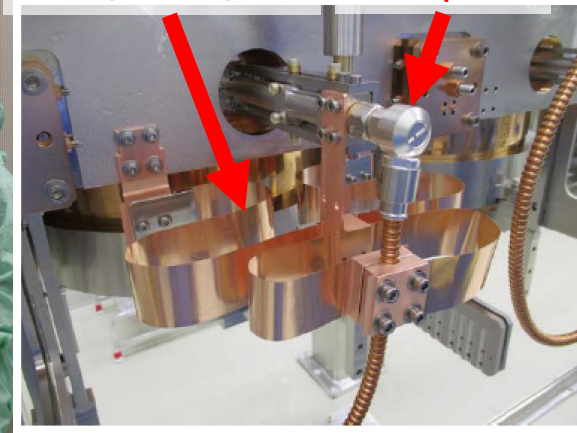


Status of Phase 1

- Removal CM1: End-of-year 2015 / Wk1 2016 ✓
- Installation CM2: end Feb – end March 2016 ✓
- Installation REX 9-Gap RF amplifier: end Feb – end March 2016 ✓
- Re-installation CM1: Mid-April – week 18 ✓
- Cryo mods & maintenance: Dec 2015 – week 20 ✓
- HW & Beam commissioning CM1 & CM2: May – ~~Aug~~ Sep 2016

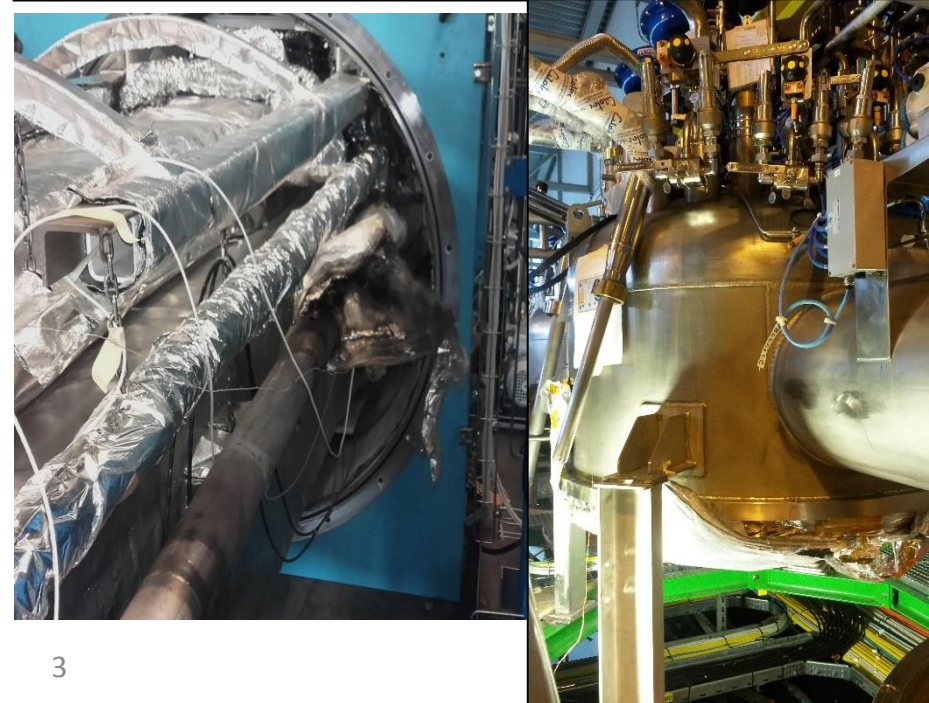


additional thermalization new coupler



Cryogenics Works

- ✓ Modification bypass jumper box of CM2
- ✓ Maintenance cryo plant => fixing of all air leaks
- ✓ DEWAR commissioning
- ✓ Controls

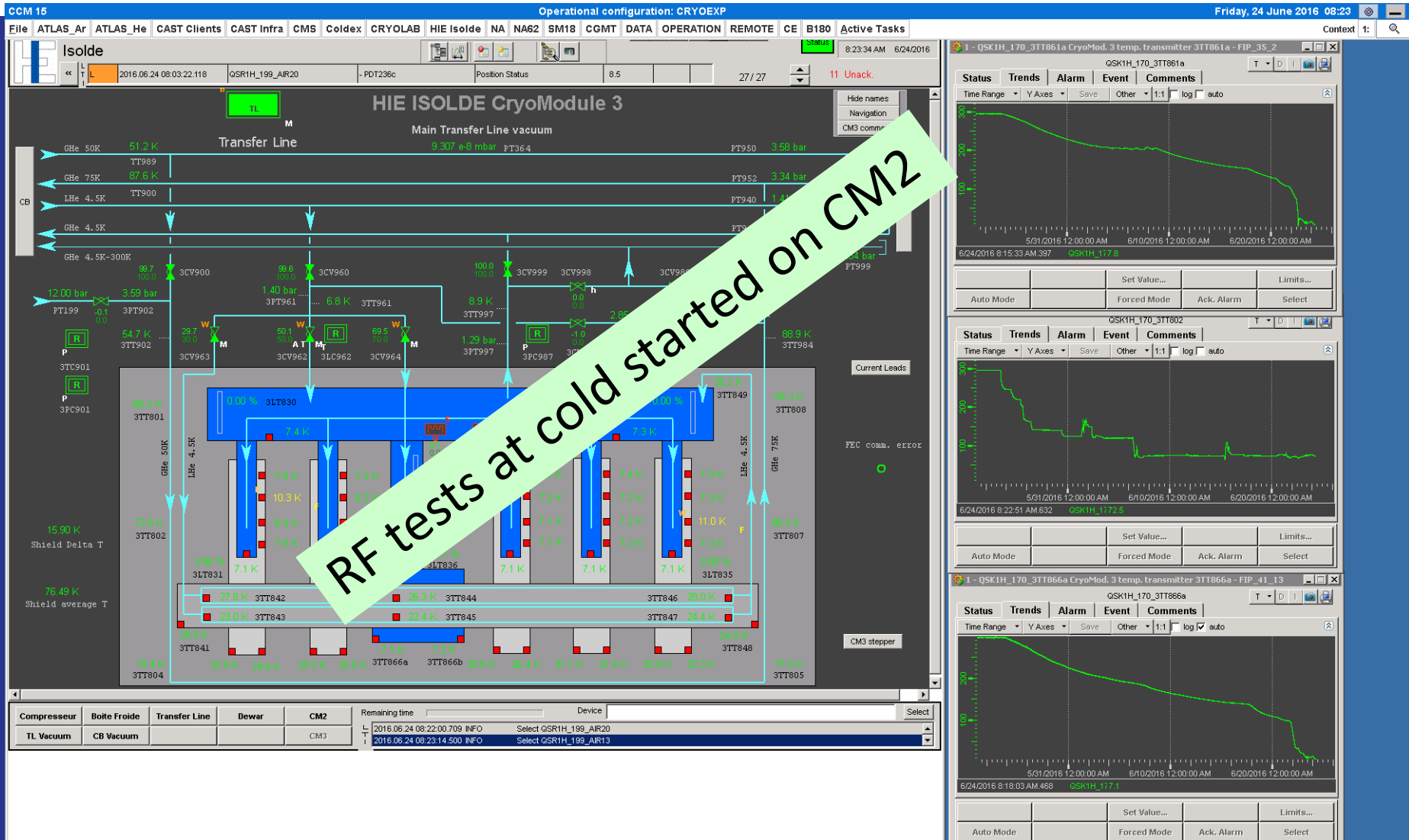


REX Start-up

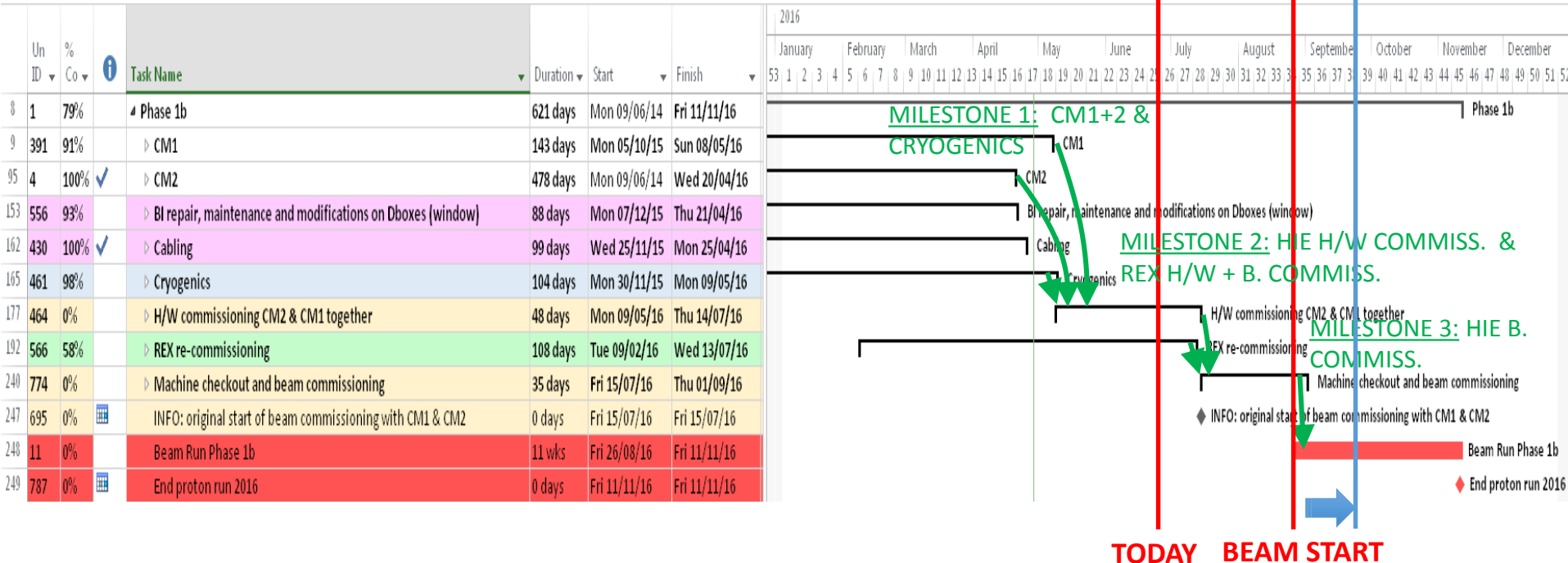
- ✓ Consolidation of the vacuum cryo compressor pumps
- ✓ All systems other than the 9gap amplifier ready as scheduled (101 MHz RF systems, vacuum, power converters, magnets, diagnostics, controls...)
- ✓ Start-up of 9gap RF delayed by 2.5 weeks
- ✓ Phasing of the RF structures on-going



Cool down of CM1 and CM2

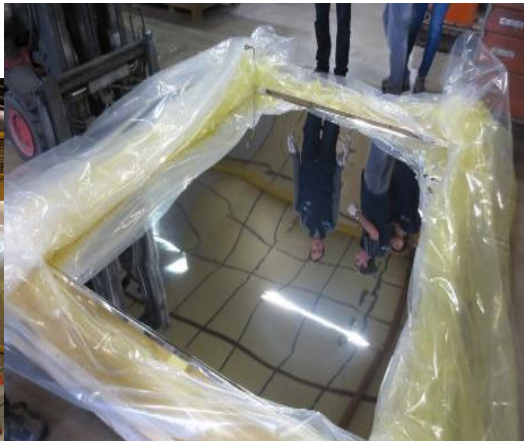


PLANNING FOR PHASE 1

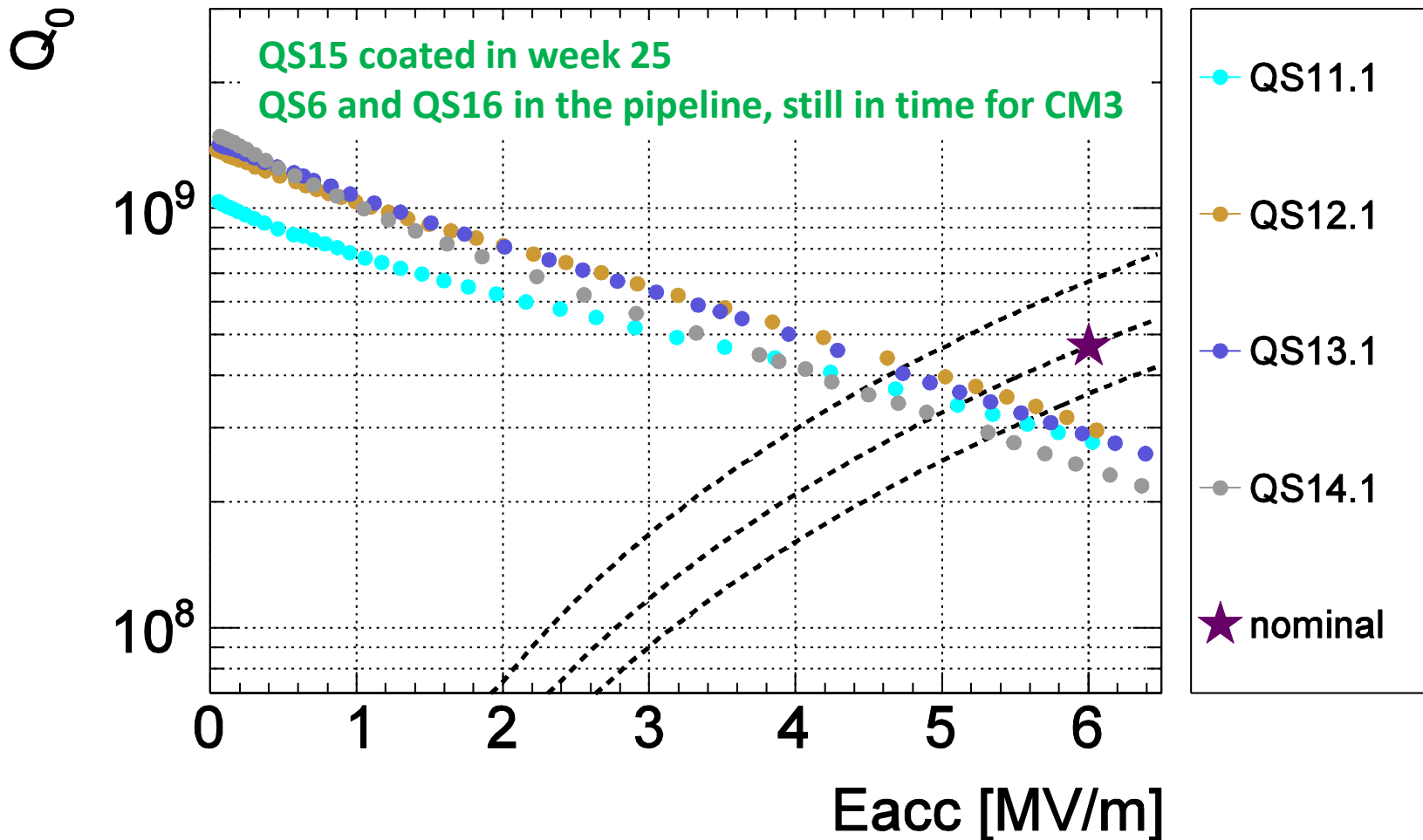


- ❖ Extended overhaul of cryo-plant + Issues that have emerged during the cooldown process
=> **caused so far 4 weeks delay on the planning**
- ❖ HW commissioning on going
- ❖ Mitigation plan to recover part of the delay
- ❖ Impact on start of Physics Run to be assessed

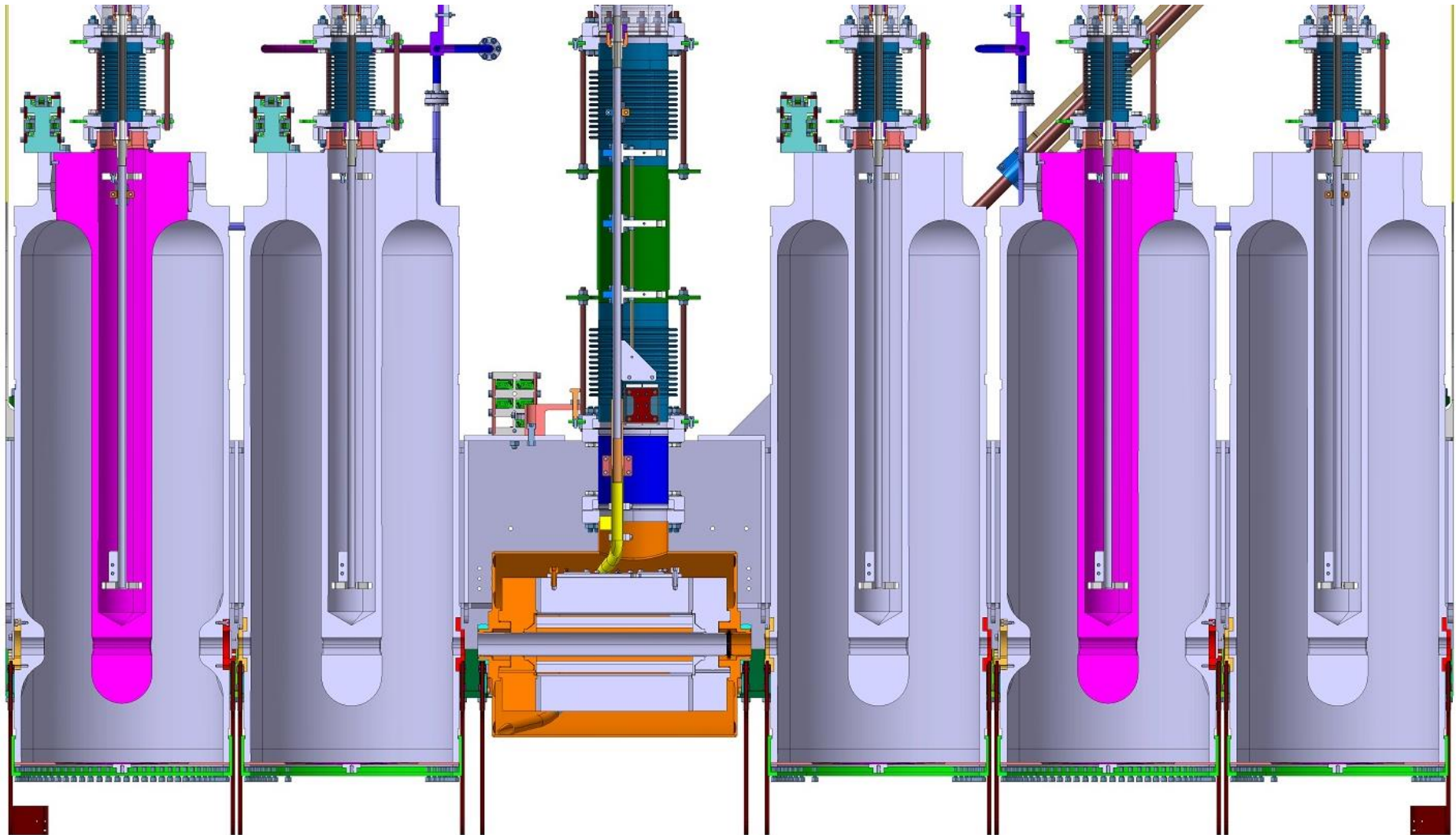
Phase 2: Assembly of CM3



4 out of 5 cavities available (tested) for CM3



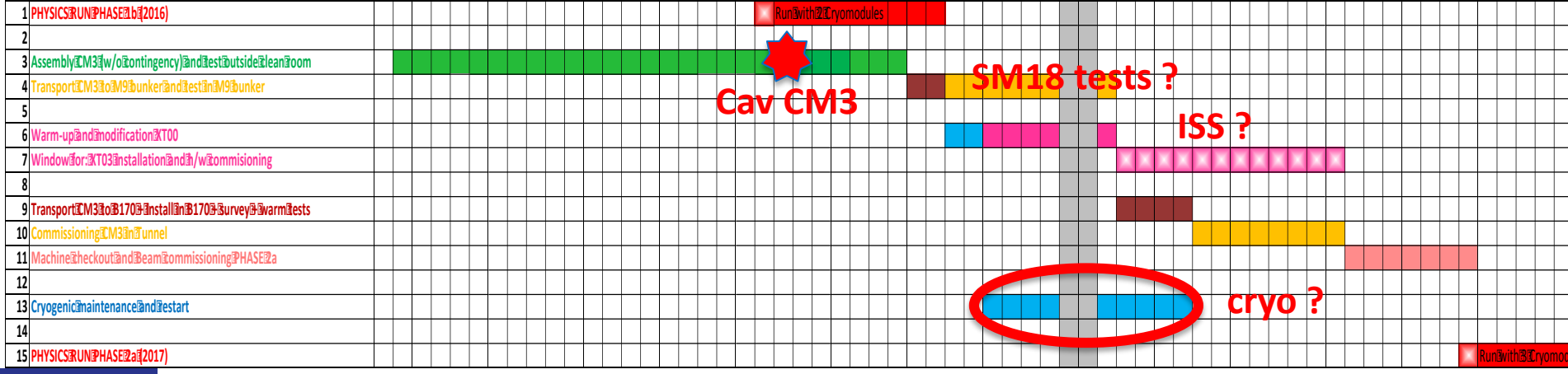
CM4 configuration



Forecast for HIE-ISOLDE Phase 2 (2016-2017)

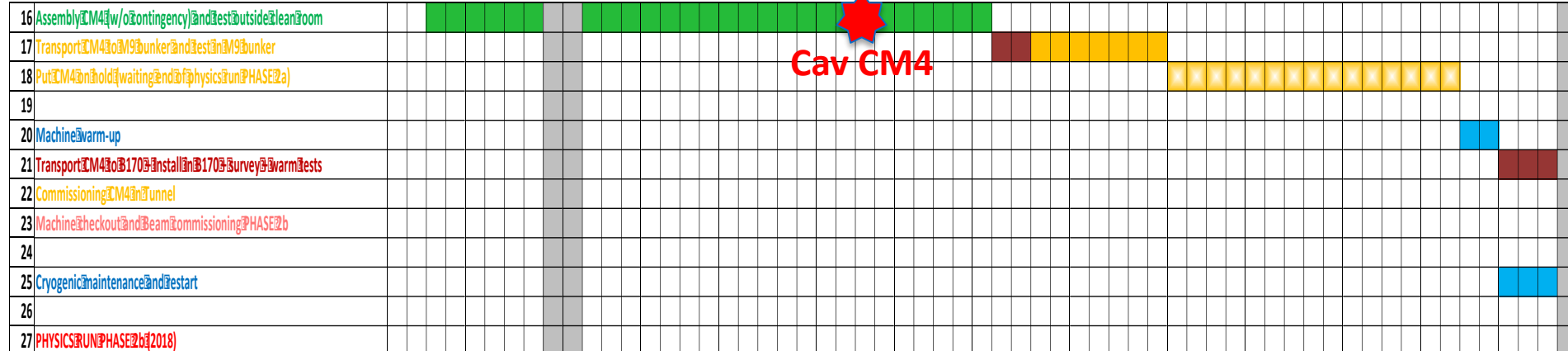
WEEKS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17																																																
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

HIE-ISOLDE PHASE 2a



WEEKS	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17																																															
	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52

HIE-ISOLDE PHASE 2b



Overall Summary

- Phase 1 installation is now completed.
- HW commissioning and beam commissioning has started => **> 3 wks delay** due to extended cryo plant overhaul + longer then expected cooldown



Mitigation plan to recover part of the delay

- Impact on start of Physics Run to be assessed
- Planning for Physics with 3 and then with 4 cryomodules chosen such as to maximise beam time in 2017 and 2018 respectively (25 wks)
=> Main limitation = restart of cryo plant on time during TS
- **Cavity performance and availability for Phase 2 being addressed**



Thank you!





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