



TG5/SAR Meeting

DREAM: Overview of NCR and NIT's @17/03/26

S. Desert, P. Harbott, F. Porcher, A. Fornell, A. Poque, P. Brant Carvalho
+ Support groups

DREAM: Status of NCR

There is one NCR related to DREAM:

NCR 10635:

Oversized gaps in the DREAM Guide Shielding

NCR 10635:

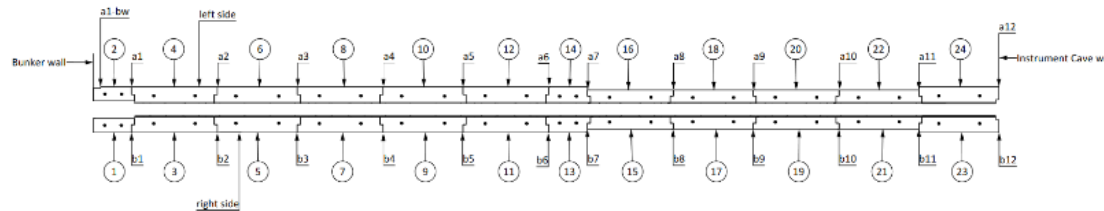
To be resolved before TG6/ORR

Oversized gaps in the DREAM Guide Shielding (23 on 292)

Reported in *ESS-5796752 DREAM Guide Shielding - Gap Measurement sheet*

Reported in *ESS-5796751 SAT DREAM Guide Shielding*

→ RP will measure in the area once the instrument is operational and decide if more shielding is needed



Gap	Value (mm)	Average (mm)	Gap	Value (mm)	Average (mm)
a1	Top	12	b1	Top	4
	Bottom	10		Bottom	10
a2	Top	9	b2	Top	13
	Bottom	5		Bottom	11
a3	Top	12	b3	Top	18
	Bottom	10		Bottom	18
a4	Top	8	b4	Top	17
	Bottom	8		Bottom	20
a5	Top	15	b5	Top	6
	Bottom	10		Bottom	5
a6	Top	10	b6	Top	16
	Bottom	12		Bottom	20
a7	Top	15	b7	Top	8
	Bottom	17		Bottom	10
a8	Top	15	b8	Top	10
	Bottom	17		Bottom	8
a9	Top	12	b9	Top	10
	Bottom	5		Bottom	12
a10	Top	5	b10	Top	12
	Bottom	15		Bottom	12
a11	Top	10	b11	Top	22
	Bottom	0		Bottom	13
a12	Top	20	b12	Top	17
	Bottom	24		Bottom	17

Owner: Senad

Assignee:

Status: To do

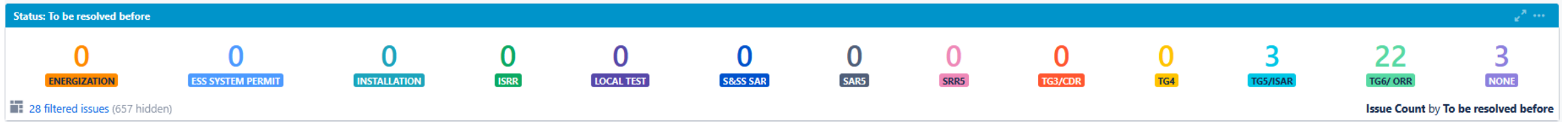
Implication for DREAM: ok

DREAM: Status of NIT's

NSS Issue Tracker Tickets / Rich Filter Results

Clé	État	Résumé	Instrument	Issue source	To be resolved before	Personne assignée	Rapporteur	
NIT-632	IN REVIEW	DREAM: CDRE boards overheating	DREAM	Installation/SAT	TG6/ ORR	Irina Stefanescu	Irina Stefanescu	
NIT-691	A FAIRE	DREAM: Firmware delivers data with negative rTOFs		Cold commissioning	TG6/ ORR	Torbjörn Grahm	Irina Stefanescu	
NIT-674	A FAIRE	DREAM Live data display of detectors using logical coordinates	DREAM	Other	TG6/ ORR	Vincent Hardion	Florence Porcher	
NIT-673	A FAIRE	DREAM Live data display of HR and SANS detectors using logical coordinates	DREAM	Other	TG6/ ORR	<i>Non attribuée</i>	Florence Porcher	
NIT-672	A FAIRE	DREAM Ar-CO2 gas pressure at detector and related alarm	DREAM	Other		<i>Non attribuée</i>	Florence Porcher	
NIT-493	A FAIRE	Isolate grounding detector from MCA	DREAM	Installation/SAT	TG5/iSAR	Peter Harbott	Sylvain Desert	
NIT-688	A FAIRE	DREAM HikVision cameras	DREAM	Installation/SAT	TG6/ ORR	Sylvain Desert	Florence Porcher	
NIT-687	A FAIRE	DREAM: Gas panel for the beam monitors	DREAM	Installation/SAT	TG6/ ORR	Jesper Ringnér	Florence Porcher	
NIT-686	A FAIRE	DREAM: Reinstallation of instrument manifolds for cooling	DREAM	Installation/SAT	TG6/ ORR	Jesper Ringnér	Florence Porcher	
NIT-680	A FAIRE	DREAM EPL model to be completed	DREAM	TG5/SAR	TG6/ ORR	Sylvain Desert	Florence Porcher	
NIT-679	A FAIRE	DREAM Live data: Accumulated Detector counts rate	DREAM	Installation/SAT	TG6/ ORR	<i>Non attribuée</i>	Florence Porcher	
NIT-678	A FAIRE	DREAM: Slits limits are displayed with incorrect accuracy	DREAM	Installation/SAT	TG6/ ORR	George Kontogiorgos	Florence Porcher	
NIT-677	EN COURS	Iseg HV modules have unstable operation	DREAM	Installation/SAT	TG6/ ORR	Irina Stefanescu	Irina Stefanescu	
NIT-676	A FAIRE	DREAM: Corrections on Goods lift after yearly inspection	DREAM	Other		Anna Fornell	Florence Porcher	
NIT-668	A FAIRE	DREAM visual inspection of slits	DREAM	Cold commissioning	TG6/ ORR	Sylvain Desert	Florence Porcher	
NIT-667	A FAIRE	False floor - Distribution board	DREAM	Cold commissioning	TG5/iSAR	Sylvain Desert	Giuseppe Aprigliano	
NIT-660	A FAIRE	NCR 10635 Oversized gaps in the DREAM Guide Shielding	DREAM	Installation/SAT	TG6/ ORR	Ana Cintas	Giuseppe Aprigliano	
NIT-651	EN COURS	DREAM: CIPIX error, SUMO5, Ring 1 / FEN1 (EndCap BW, Sector 9)	DREAM	Installation/SAT	TG6/ ORR	Irina Stefanescu	Irina Stefanescu	
NIT-640	A FAIRE	SAT+ iSAT of DREAM polarizer translation stage	DREAM	Cold commissioning	TG6/ ORR	<i>Non attribuée</i>	Florence Porcher	
NIT-633	EN COURS	DREAM: Test the RMM with MRF timing	DREAM	Installation/SAT	TG6/ ORR	Nicklas Holmberg	Irina Stefanescu	
NIT-629	EN COURS	DREAM: detector data format is not according to the ICD	DREAM	Installation/SAT	TG6/ ORR	<i>Non attribuée</i>	Irina Stefanescu	
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NIT-436	A FAIRE	Change request for CUP - DREAM detector gas exhaust	DREAM	Other	TG5/iSAR	Jesper Ringnér	Anna Fornell	
NIT-75	EN COURS	Replace the upstream interface plate for the shutter	DREAM	Installation/SAT	TG6/ ORR	Gabor Laszlo	Gabor Laszlo	
NIT-60	EN COURS	Remote handling accuracy out of range for the DREAM shutter.	DREAM	Other		Gabor Laszlo	Gabor Laszlo	
NIT-669	A FAIRE	DREAM: Close-loop to Open-loop control of slits	DREAM	Cold commissioning	TG6/ ORR	Vincent Hardion	Florence Porcher	

Among a total of 39 NIT - 28 remain open (@17/03/26)



Focus on:

- ✓ 3 to be closed at SAR: NIT-436, NIT-493, NIT-667
- ✓ 1 critical : NIT-632
- ✓ 1 Highest NIT-691
- SPARE - 4 High NIT-493, NIT-672, NIT-673, NIT-674

NIT-436 Change request for CUP - DREAM detector gas exhaust

Pipe exhaust from Dream detectors is outside the cave
Recommendation from RP to reroute inside the cave to containment ventilation
→ ESS-5830195 CUP Dream Detector Return Pipe
Design done and released - installation pending



Owner: Anna



Assignee: Jesper

Status: To do

Implication for DREAM: ok

NIT-493 Isolate grounding detector from MCA

MCA grounding of the slit system is connected to the detector frame
 The detector shall have its own grounding
 Punch list in ESS-5080456 SAT Dream Slit System released
 PE from MCA cabinet installed
 No issue with noise on detector due to the slits → To be closed

#	DESCRIPTION	Categ.	NIT	Repeat Test	RESPONSIBLE	COMPLETION DATE
1	A PE sign needs to be attached beside the connection point of the PE wire (currently a screw of the vacuum flange). 	c)	N/A		MCAG Technician	2026-03-12
2	The feedthrough flange lacks high-voltage warning labels beside the Lemo feedthrough connectors for the piezo actuators 	c)	N/A		MCAG Technician	2026-03-12
3	The Protective Earth (PE) wire from the sensor box should be connected directly to the vacuum feedthrough flange, not to the flange screw.	d)	N/A		DREAM Instrument Team	TBD
4	Piezo stages operate at 130V, so the metallic part of the stage and all metal parts that the Kapton control cable could touch must be connected to the Protective Bonding (PB) network of the instrument. If this is technically not feasible a specific procedure needs to be added in the Operation and Maintenance Manual of the subsystem: During service operation of the actuators the metal parts inside the vacuum chamber need to be temporarily connected to PE or PB.	d)	N/A		DREAM Instrument Team (entry into Operation and Maintenance Manual), Support by MCAG Engineer)	SAR
5	All Kapton cables inside vacuum vessels are sensitive, so they must be routed and secured carefully to prevent insulation damage and contact to guide house structure. Fixation shall be done with a proper PEEK cable tie mount (Panduit TM2S8-C71).	d)	N/A		Instrument team (support by MCAG Technician)	ORR

Owner: Sylvain

Assignee: Peter

Status: To do

Implication for DREAM: ok

NIT-667 False floor - Distribution board

Not needed according to Stefan Arvidsson (Electrical compliancy)
Waiting for confirmation from Axel Wahlstrom

Plan: Create NCR and keep as it is



Owner: Giuseppe

Assignee: Sylvain

Status: To do

Implication for DREAM: ok

NSS Issue Tracker Tickets / Rich Filter Results

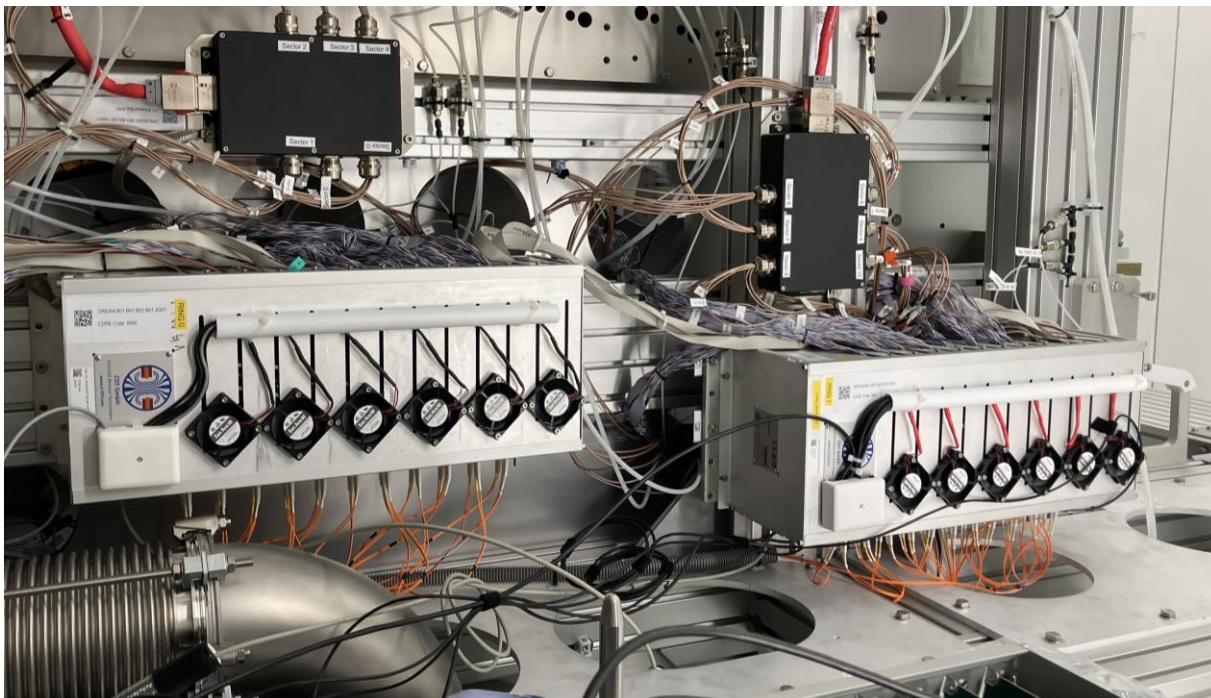
Clé	État	Résumé	Instrument	Issue source	To be resolved before	Personne assignée	Rapporteur	Pr
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NIT-632 DREAM: CDRE boards overheating

To be resolved before TG6/ORR

CDRE boards for the Backward EndCap detector module operate at high temperatures > 60deg

- Need for active cooling
- Fan added to the cover and successfully tested for 1 week (temp < 40 deg)
- Fan added to new crates by CdT – waiting for delivery



Owner: Irina

Assignee: Irina

Status: In Review

Implication for DREAM: ok

NSS Issue Tracker Tickets / Rich Filter Results

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NIT-691 DREAM: Firmware delivers data with negative rTOFs

To be resolved before TG6/ORR

Only seen on Dream

Under investigation - NIP-339 for follow-up

(more on Irina's presentation at 11:15)



Data from March 13, 2026

Owner: Irina

Assignee: Torbjorn

Status: To do

Implication for DREAM: ok

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NIT-672: Live visualization of the gas pressure at gas panels inside and outside cave in NICOS

Notification App when the Ar/CO2 pressure gets too low and setup an alarm
 → To avoid getting air in the system

Status:

Readout done – TECHFORCE-134

Now linked to TECHFORCE-117 Implement notification

Owner: Florence

Assignee: Nicklas

Status: To do

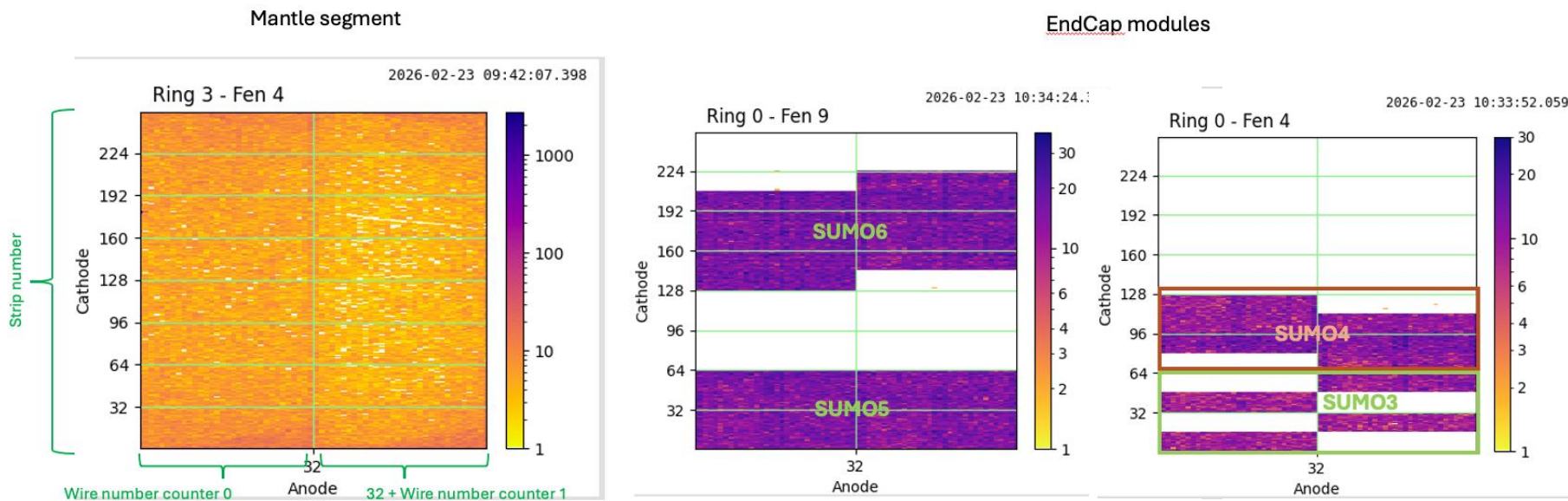
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NIT-673 and NIT-674: Live data display of DREAM detectors - HR and SANS, Sumo and mantel

Instrument needs logical representation to allow maintenance and debugging














Owner: Florence

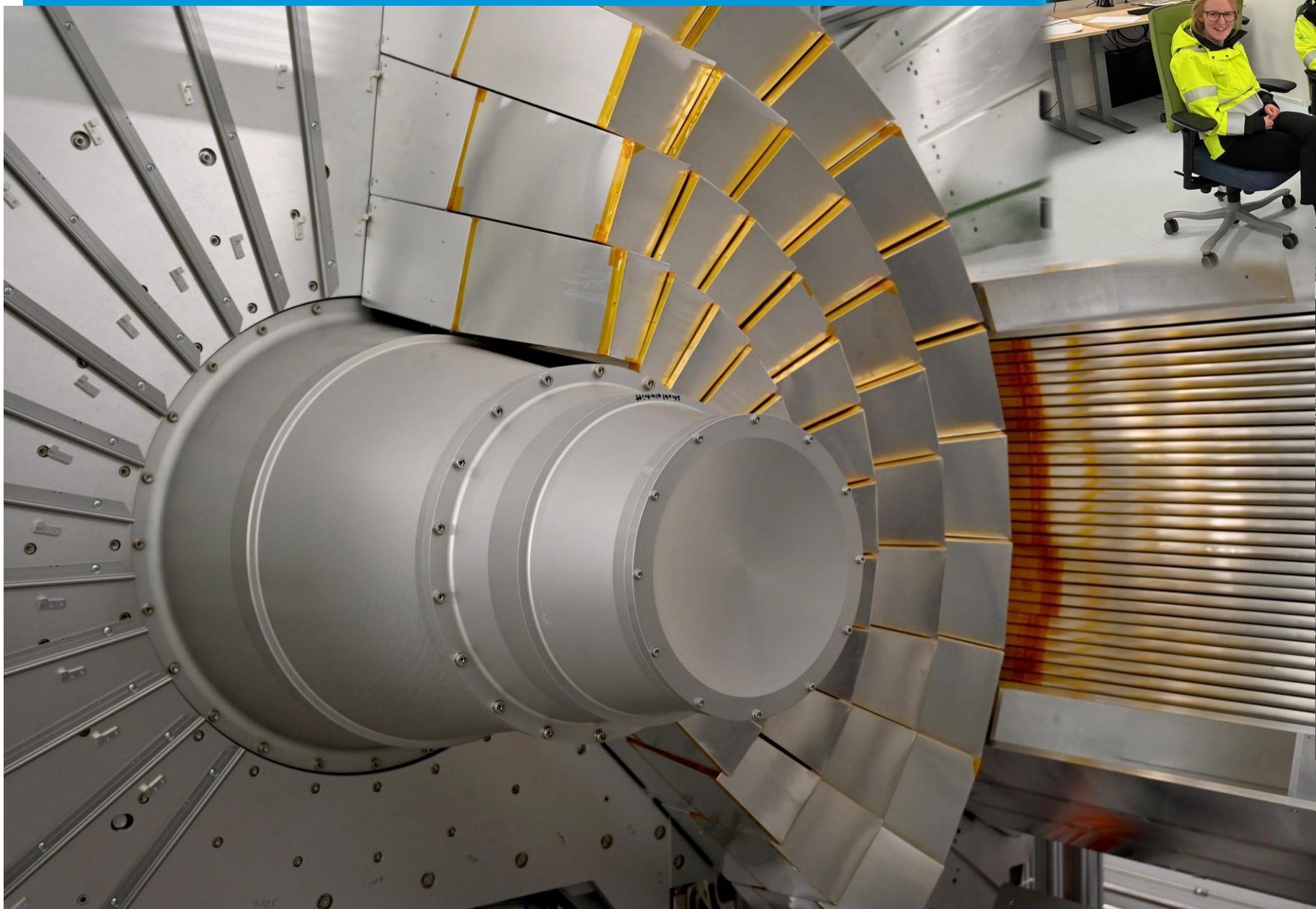
Assignee: Vincent

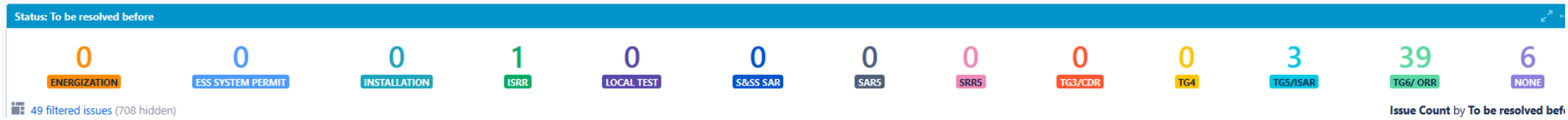
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THANK YOU!





49 remain open (+21 during review)

By iSRR:

- ✓ 1 Major **NIT-760** EPL Corrections and update

By TG5:

- ✓ 3 on MCA - SAT slit punch list

By TG6:

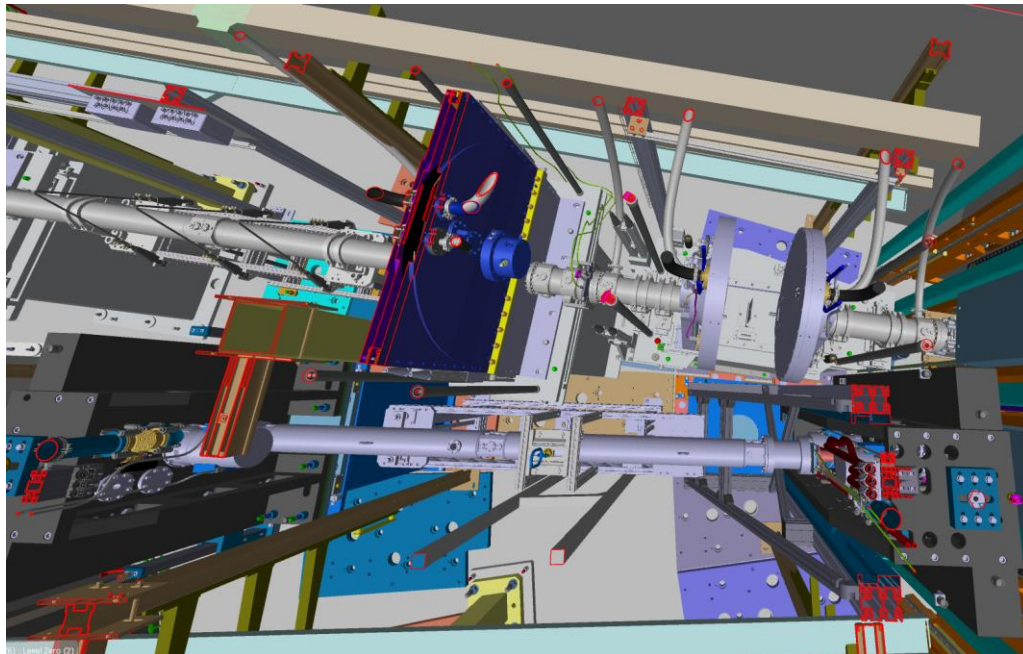
- ✓ 9 on energization formalization (outside EAM)
- ✓ 2 on CUP – SAT punch list + 1 on potential future BM in bunker
- ✓ 1 on MCA for future sample stack

NCR 10454 → CLOSED

To be resolved before TG6 / ORR

ODIN isolation issue

- ODIN overlap choppers had resistivity values lower than $1\text{M}\Omega$
- Risk to transmit electrical noise to Dream Beam Monitor
- There is no easy way to isolate the choppers: complete uninstallation, removal of plates and grouting with epoxy → easier to isolate the beam monitors
- Dream Beam Monitor isolated from instrument line and gas line – only connection by the slab
- Actual noise levels permit operation



Owner: Robin

Assignee: Richard Ammer

Status: Closed

Implication for DREAM: ok

DREAM - SAR

Uneven gaps in the DREAM Cave roof

Reported in *ESS-5878375 – DREAM - Shielding SAT*

Reported in *ESS-5993146 - DREAM - Cave Shielding gaps*

→ Gaps can fulfil the requirements when they are evenly installed

→ RP will measure once the instrument is operational

Interface	x (mm)	Z (mm)
Cave / L1	-	27
L1 / Z1	-	10
Z1 / T1	-	5
T1 / R1	-	17
R1 / Cave	-	25
Cave / L1	34 – 10 (22)	-
Cave / Z1	33 – 4 (19)	-
Cave / T1	33 – 27 (30)	-
Cave / R1	41 – 12 (27)	-

