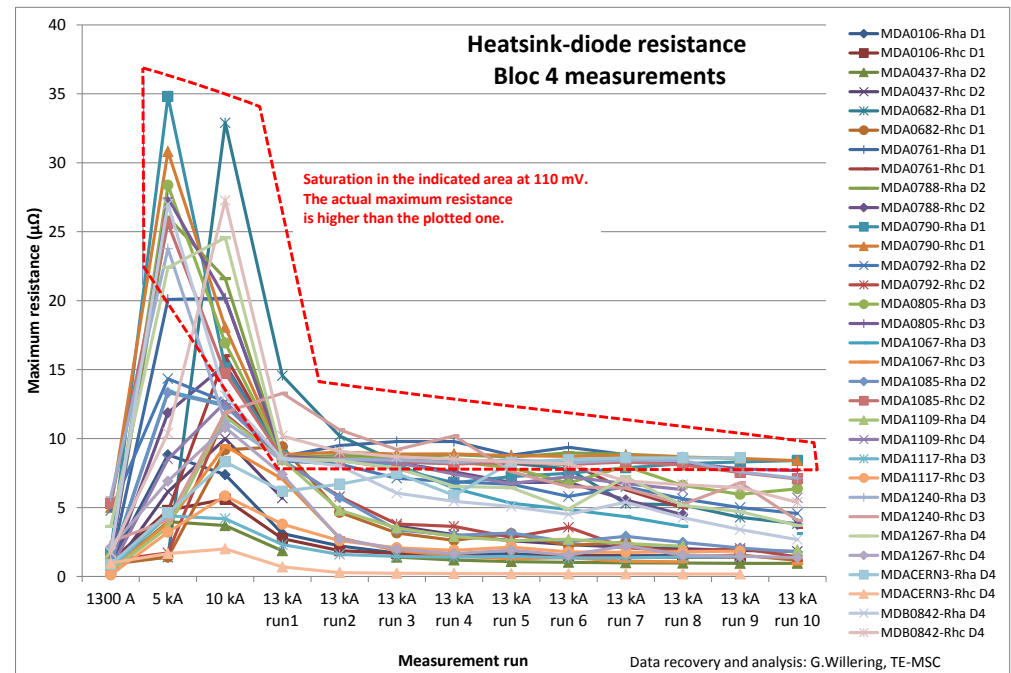
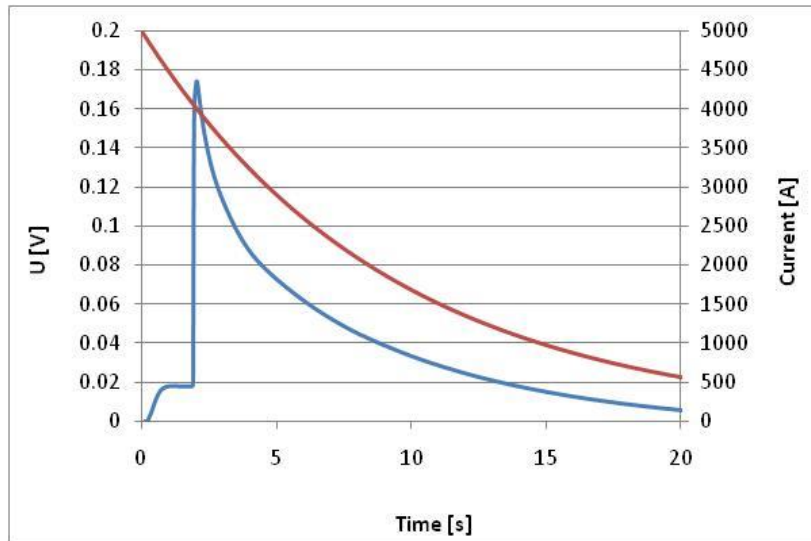


'Task force' Diodes:

cern.ch/diodes

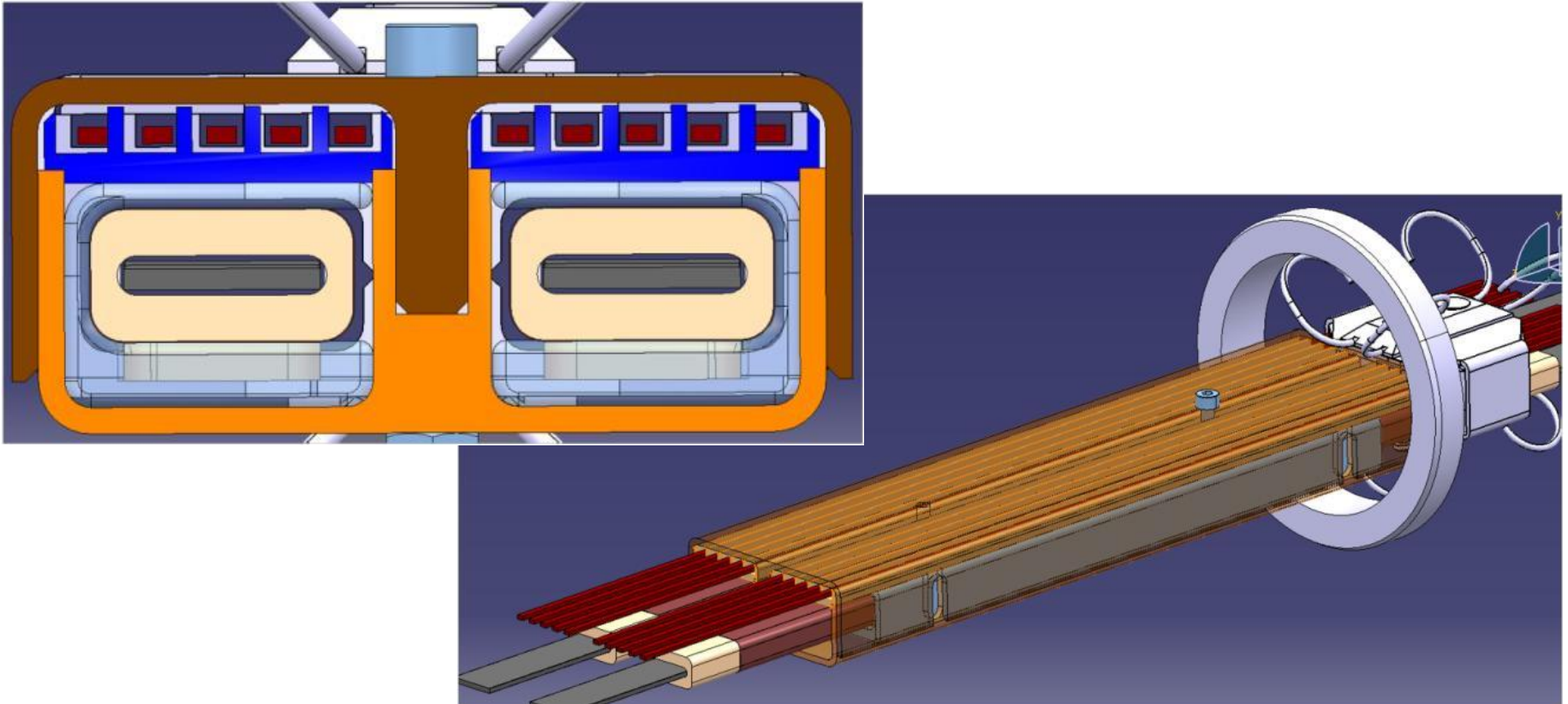
- Triggered by strange measurements of the lead voltages on several diodes in S56 (May, July, Aug)
- Weekly meetings since about 2 months
- Data mining from the past (Frascati and Block 4) shows non-understood results
- Comsol modeling ongoing (Daniel M.)
- TE-MS-C is doing mechanical modeling and testing on the bolts
- Testing diodes in SM18 just started



Task force Splices:

cern.ch/splices

- Functional specification finished last week.
- Comsol calculations, especially on shunted joints (Daniel M.).
- Preparation of the review for end Nov.
- 'Screening circuits' finalized with set of recommendations. In total about 22 recommendations. 5-10 concern our section.



Modifications to simulation codes CUDI and QP3:

- Add possibility to simulate BSCCO conductors.
- Update of material properties.
- Some changes for CSCM test.
- Some changes required for hot spot calculations.

Threshold IPQ:

- Calculations for an increased voltage threshold on the IPQ (from 100 mV to 200-300 mV).

3rd threshold RQTD/RQTF:

- Calculations of a possible third voltage threshold on the 600 A circuits.
Presently: $I < 50$ A: 2 V, 190 ms and $I > 50$ A: 100 mV, 190 ms
target: $50 < I < 200$ A: 300 mV, 190 ms

Circuit modeling with PSpice:

cern.ch/LHC-CM

Target: to have at least one model per type of circuit, validated by PM data from the machine.

Circuit type	Circuit	EE	
13 kA	RB	Yes	Emmanuele
	RQ	Yes	Emmanuele
IPD	RD2	No	Evelina
IPQ	RQ4	No	Emmanuele
	RQ10	No	Emmanuele
Inner triplet	RQX	No	Scott
600 A	RQS	No	Evelina
	RQTL9 & 11	Yes	Evelina
80 A	RCBYH	No	Manuel

Besides modeling, now also focus on documentation and ensuring that the models are maintained/updated and remain “usable” in the future.

CSCM (aka Thermal amplifier):

- Workshop
- Validation test in SM18.
About 180 runs.
Analysis ongoing
(with Zinur and Daniel W.)
- Mini-review in 1 week

cern.ch/CSCM

