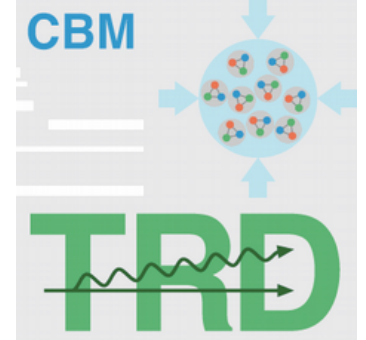




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Chamber Ageing

CBM-TRD TDR Review
2017, March 14th–15th

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- Aspect I: Chemicals of used materials (esp. gaseous evaporation)
 - Materials known in detail from ALICE-TRD chambers, to our knowledge: no effects observed over many years
 - Continuous verification in GSI detector labs, checks on individual batches of glue
- Aspect II: Effects in regular operation
 - Purity of detector gas as parameter
 - Accumulated charge as factor:
 - ALICE-TRD chambers validated at above 10 mC/cm^2 *
 - Status: first estimation for CBM-TRD is about $7 \text{ } \mu\text{C/cm}^2$ per day (50 kHz/cm², 5 hits in active volume, amplfct. 2000, full+continuous operation 24 hours)
 - Half anode wire pitch in CBM compared to ALICE

* Chilo Garabatos, private communication



- Communication to ALICE experts and GSI detector lab as well as own effort ongoing, in progress.
- Thanks to Bastian Bathen for activating contacts.



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BACKUP