

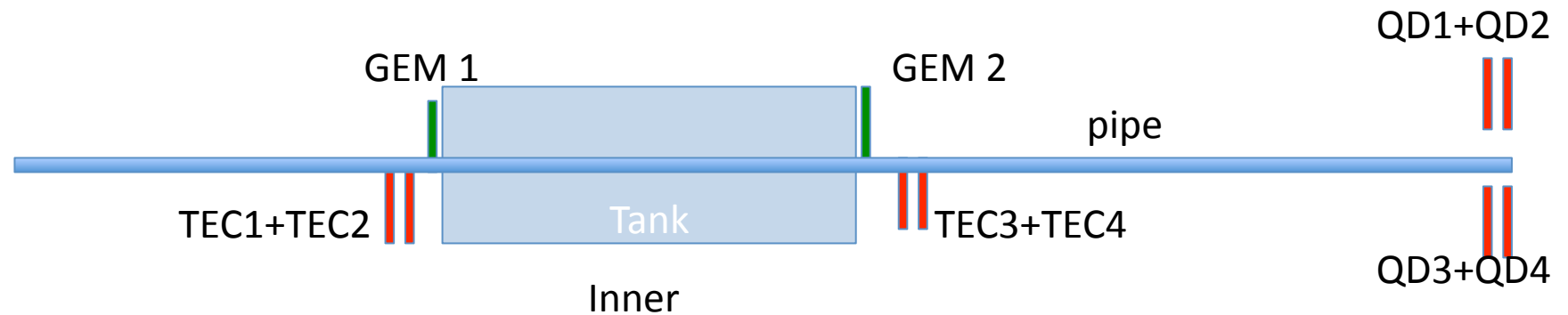
# GEM and Scint in Jun 18<sup>th</sup> MD.

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# GEM status

- Fabrizio:
  - Access during Jun 18<sup>th</sup> (morning)
    - Removed noise due to interference with beampipe currents
    - Set threshold to rather high value
    - GEM counts zero when no beam, tank radioactivity seen in the morning.
  - Both GEMs show some high currents ( $\sim 100\text{nA}$  – should be  $< 10\text{nA}$ ) at cathode and in some gaps, even with no beam
    - Can be operated but this makes us nervous.
      - » Will be investigated in the next days (from offsite)

# GEM+Scint.s during beam coasting



- PMT all ON – checked single counts, all non-zero
  - Found TEC1 and TEC2 used with Cerenkov... (not connected to DAQ)
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- GEM 2 ON
  - GEM 1 too large (1.5 $\mu$ A) cathode current – kept off

# What I saw...

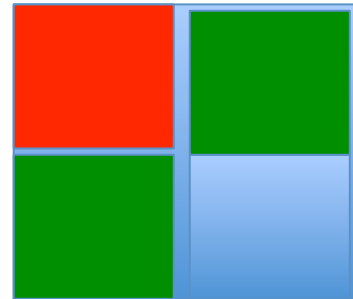
- Thanks to Alessandro, Java interface was accessible
- Start to look at around 6:20 to beam.
- GEM at 900(600) V (low gain – standby condition)
- PMT thresholds not optimized
- Found QD1+QD2 coincidence not working (zero counts)

	Coasting	Nobeam	Beam-loss	
GEM2	17KHz	0	Several $10^4$ Hz	
TEC3+TEC4	$3 \cdot 10^4$ counts	$1 \cdot 10^4$ counts	$7 \cdot 10^4$ counts	
QD3+QD4	1-10 counts	0	100- $10^3$ counts	

# Some considerations

Can clearly see beam instability with PMTs and GEMs

- GEM rate not uniform
  - Pattern in pads rates to be investigate



All pads 17KHz  
Few pads 17KHz  
All pads 0Hz

- TEC3+TEC4 need to have discr. thresholds raised