

# Modification of thresholds on cold magnets

(in light of results of Quench Test)

M. Sapinski for BLM team

BLM thresholds WG, 2010.10.25

# Present situation

- We have 2 types of thresholds:
  - for the first detector after interconnection
  - for the middle detector and after second interconnection

- We have 6 families:

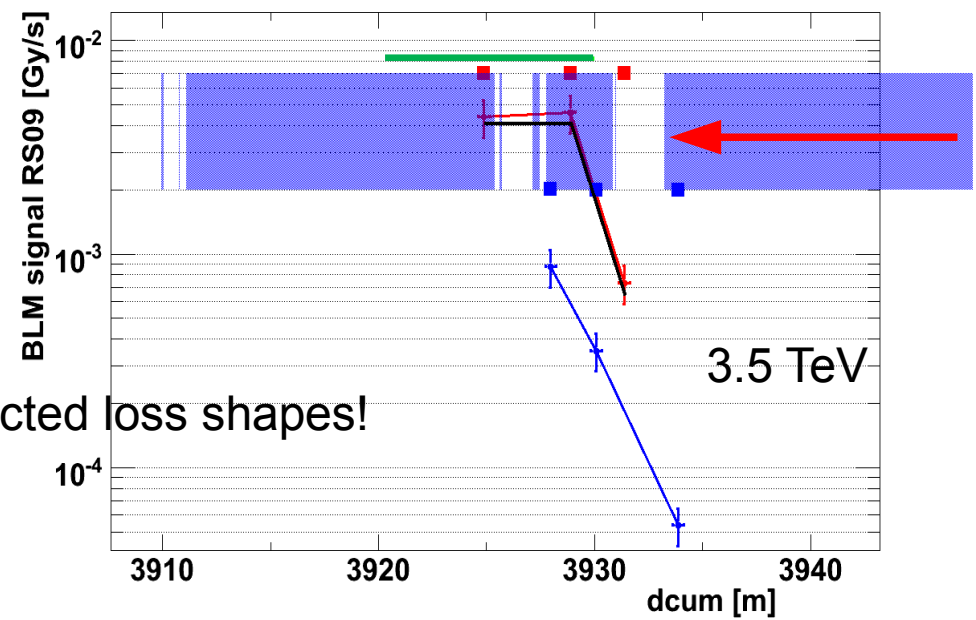
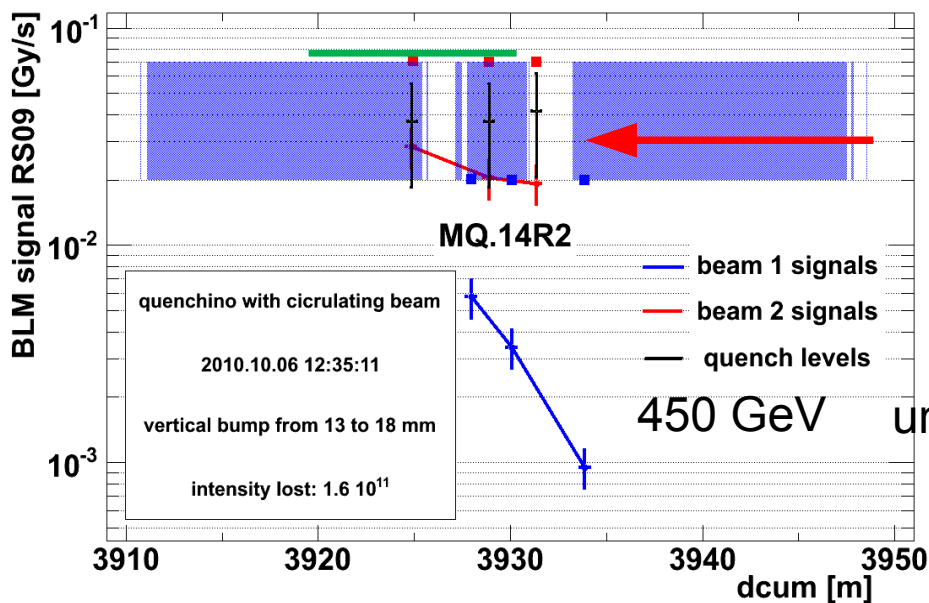
THRI.AR.B1.1\_MQ, THRI.AR.B2.1\_MQ

THRI.AR.B1.2\_MQ, THRI.AR.B2.2\_MQ

THRI.AR.B1.3\_MQ, THRI.AR.B2.3\_MQ

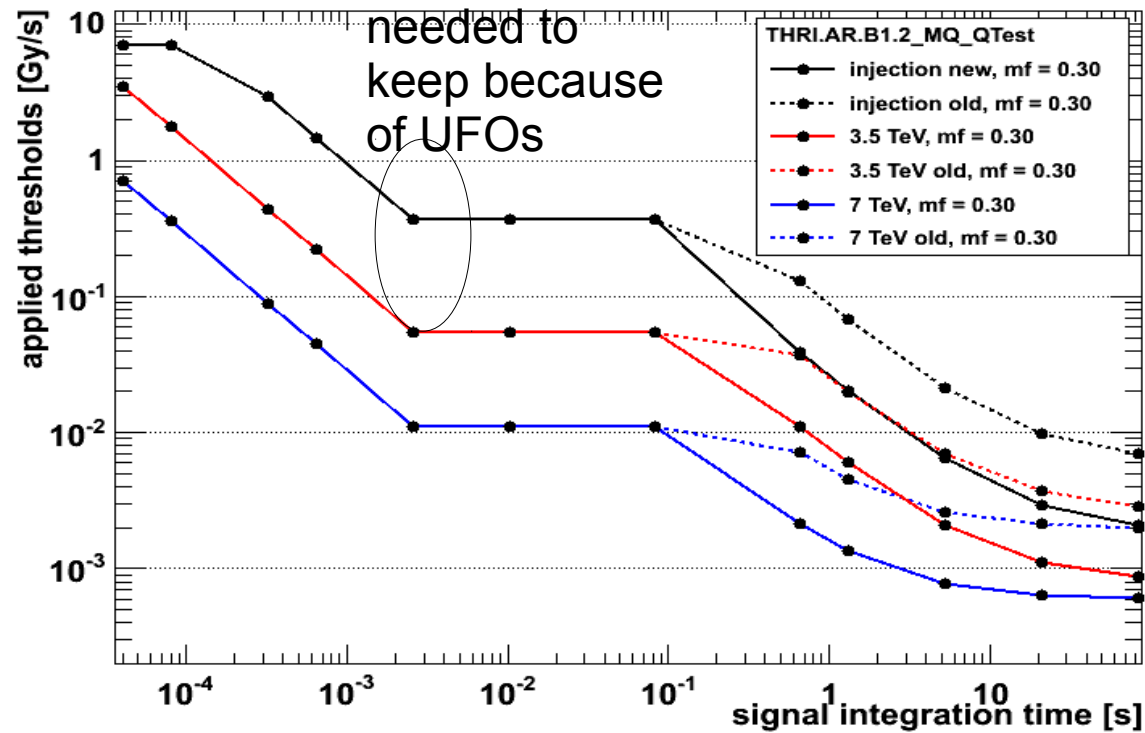
# Preliminary conclusions from the Quench Test

- For vertical loss at 450 GeV the quench occurred 2.9 below expected for type 2 threshold (THRI.AR.B2.3\_MQ family) in RS09 (1.31 s)
- For vertical loss at 3.5 TeV the quench occurred factor 2.0 below expected for type 2 threshold (THRI.AR.B2.2\_MQ and THRI.AR.B2.3\_MQ families) in RS10 (5.2 s).



# Proposal 1

- Change only thresholds of the second type (4 families)
- Decrease RS08-RS12 by factor 3
- Keep  $mf = 0.3$



# Proposal 2

- Change only thresholds of the second type (4 families)
- Decrease RS08-RS12 by factor 3
- Increase RS05 by factor 3 (for UFOs and we had no quenches there yet)
- set  $mf = 0.1$ , as initially

