# IR8 Triplet Allocation

- Geometry considerations (→ JBJ):

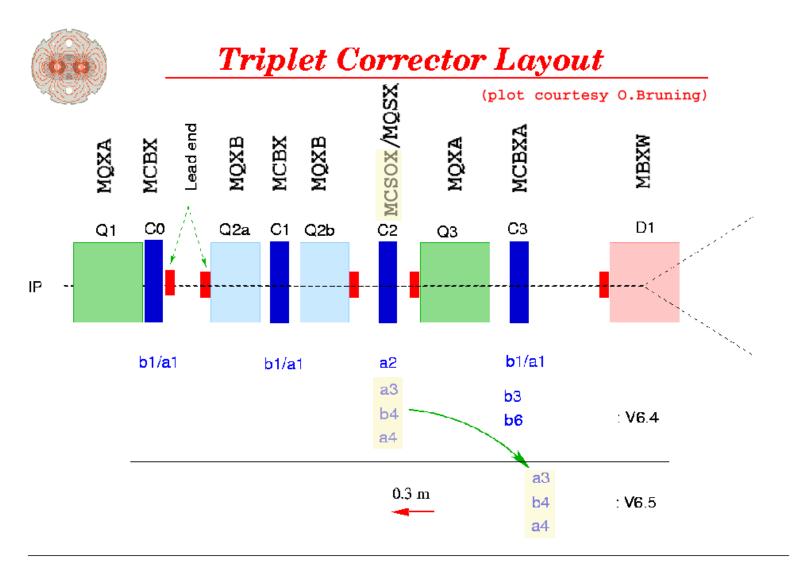
LQXA01/04 & LQXB04/05 IR8

left or right

- Q3 (LQXAC03) locked to IR8 left
- Q3 right no candidate yet → any choice of rest of 8

# IDCards Coloring & Magnet Sorting Criteria

- Collision: tracking with error table 0210 guarantees sufficiently large DA
- Injection: measured triplet errors lead to noticeable reduction of DA (→MG)
- IDCards Color Code finalized for LQXA01/02/04, LQXB03/04/05 & LQXC03
- However, new Q2 measurements will change criteria for future Q2
- Sorting done with errors at injection



LTC-03.03.2004

Frank Schmidt AB-ABP-LOC

## **Techniques**

- Milestone: Measured errors of individual magnets can now be introduced in newest MAD-X sample job to overwrite error table (→ TR)
- Errors and sign convention checked for all quadrupoles in IP8 checked → perfect!
- Semi-automatic routine prepared to produce IDCard color coding
- Script prepared for running MAD-X for all Q1/2/3 permutations → optimize triplet correction

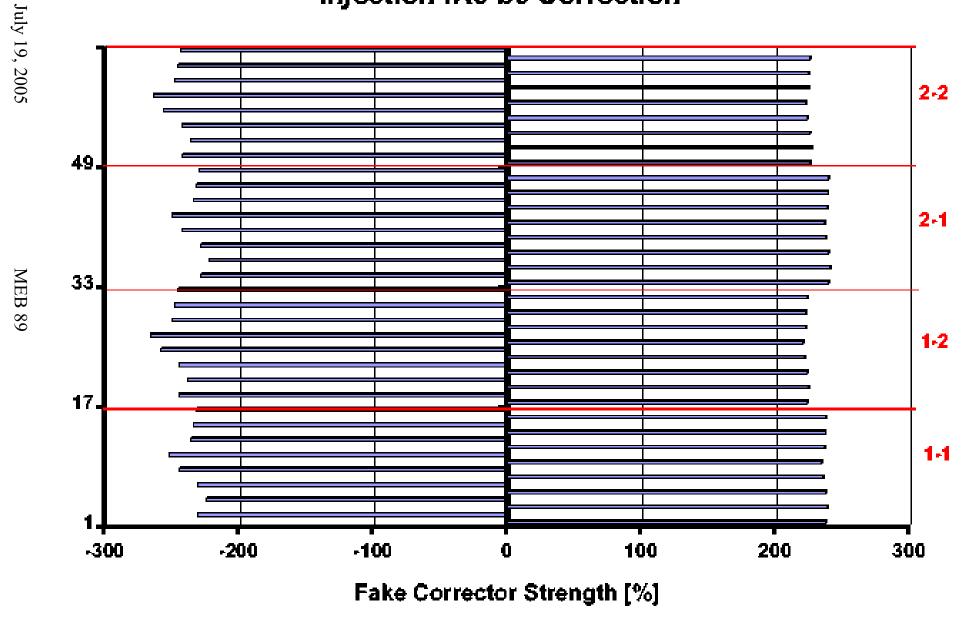
#### **Results**

- No dramatic preference found for sorting

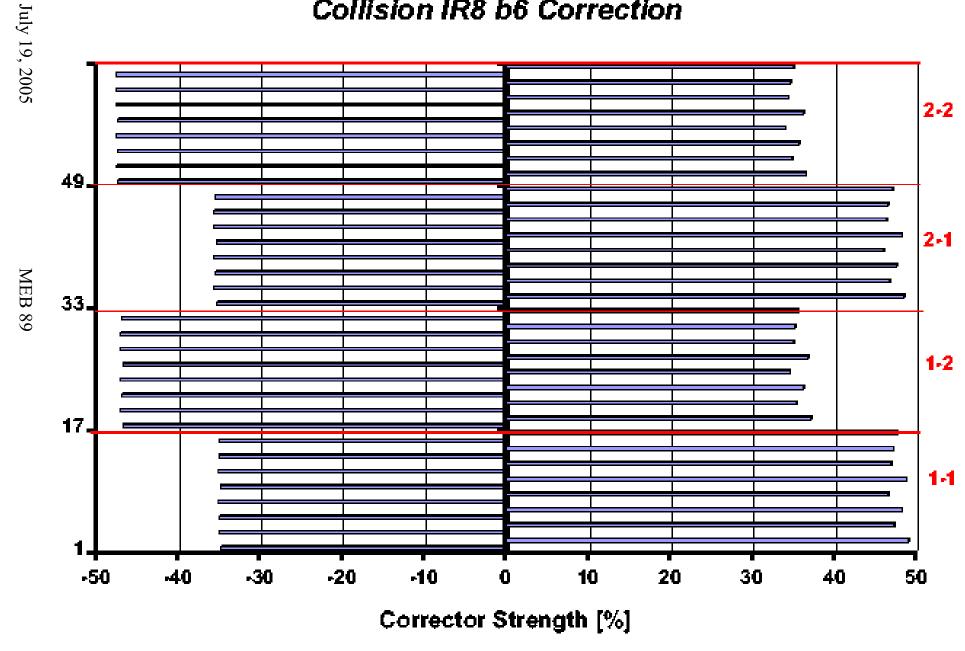
- Slight advantage for: LQXA01/LQXB04 left & LQXA04/LQXB05 right

- Tools ready for quick sorting on arrival of new data

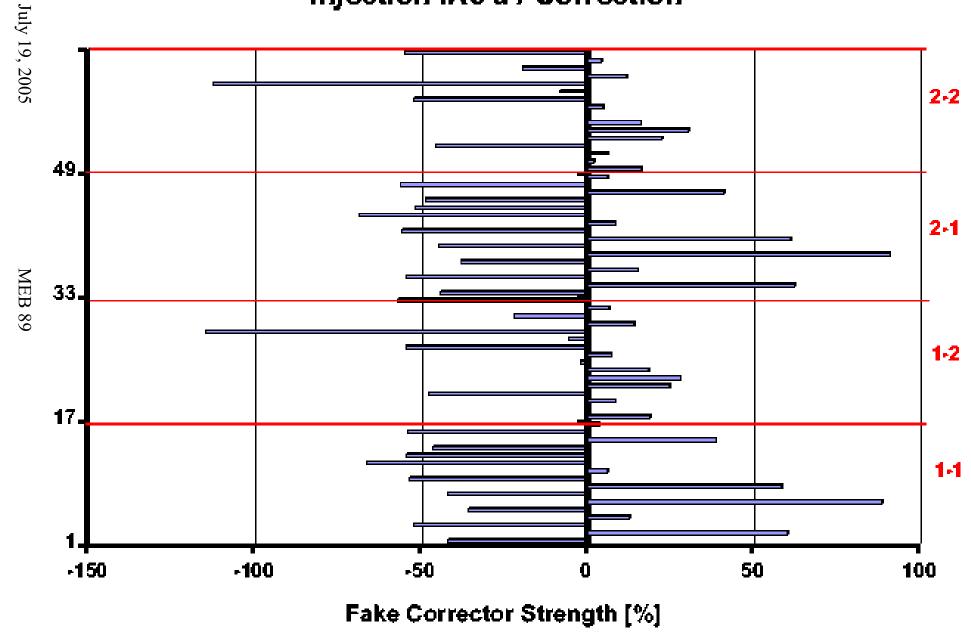
#### Injection IR8 b6 Correction



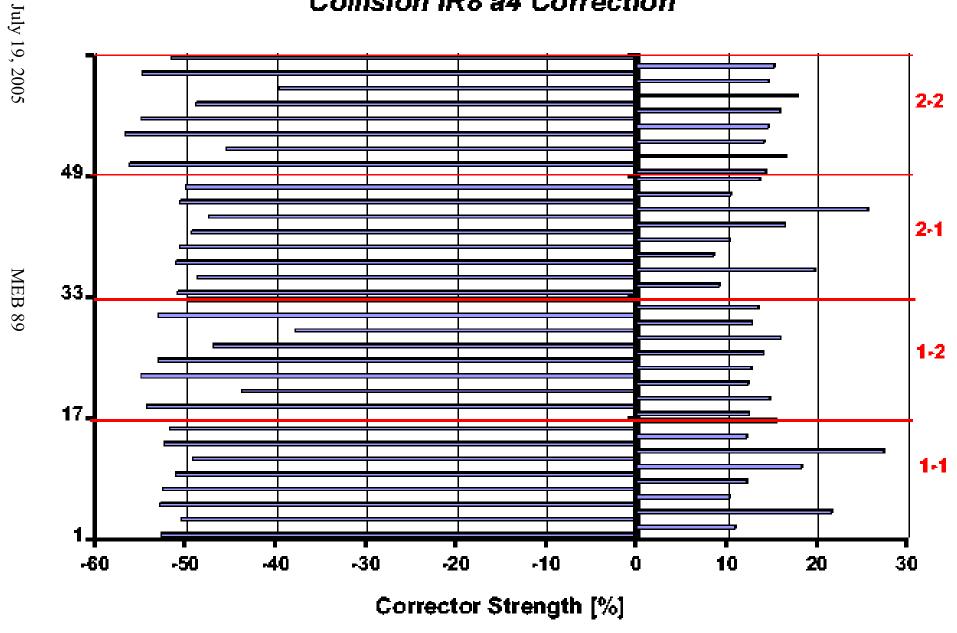
#### Collision IR8 b6 Correction



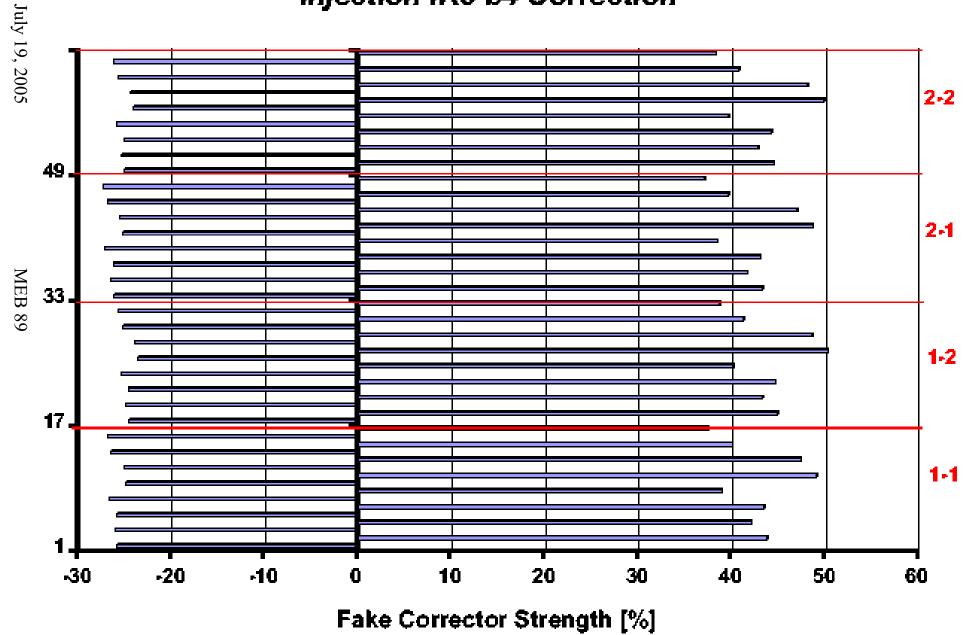
#### Injection IR8 a4 Correction



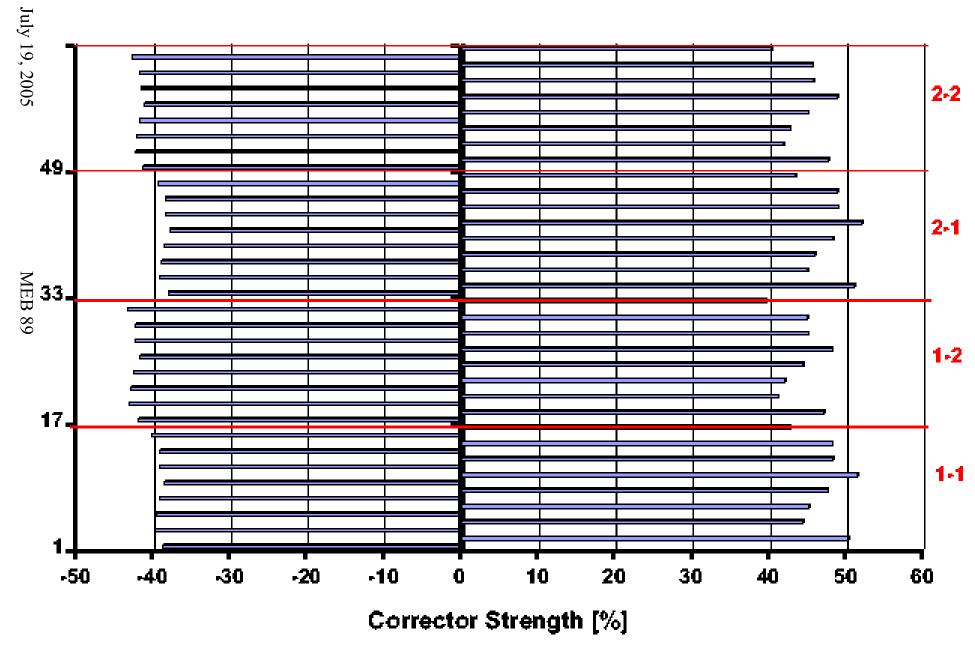
#### Collision IR8 a4 Correction



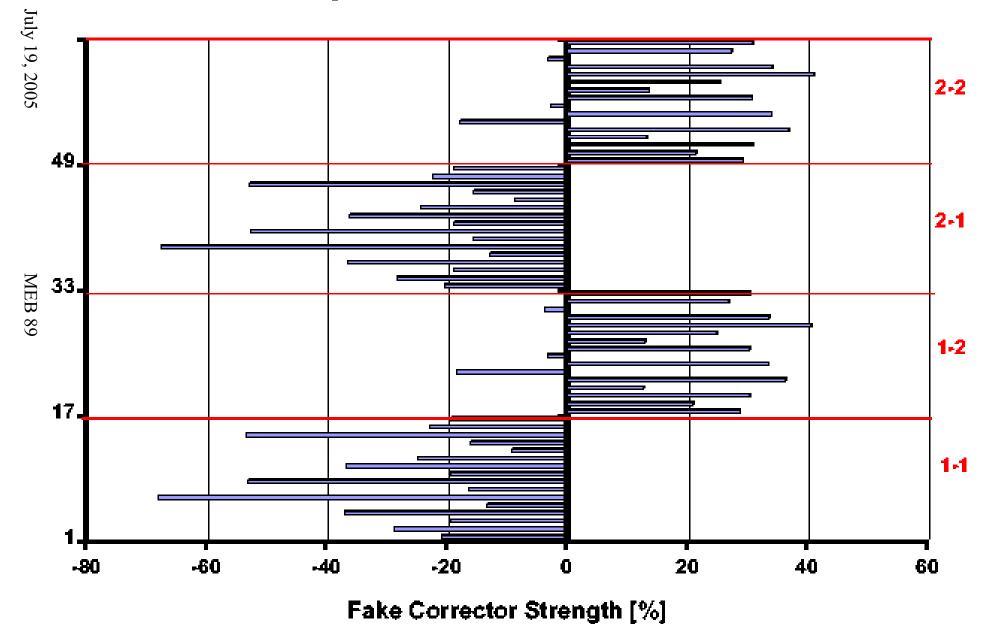
#### Injection IR8 b4 Correction



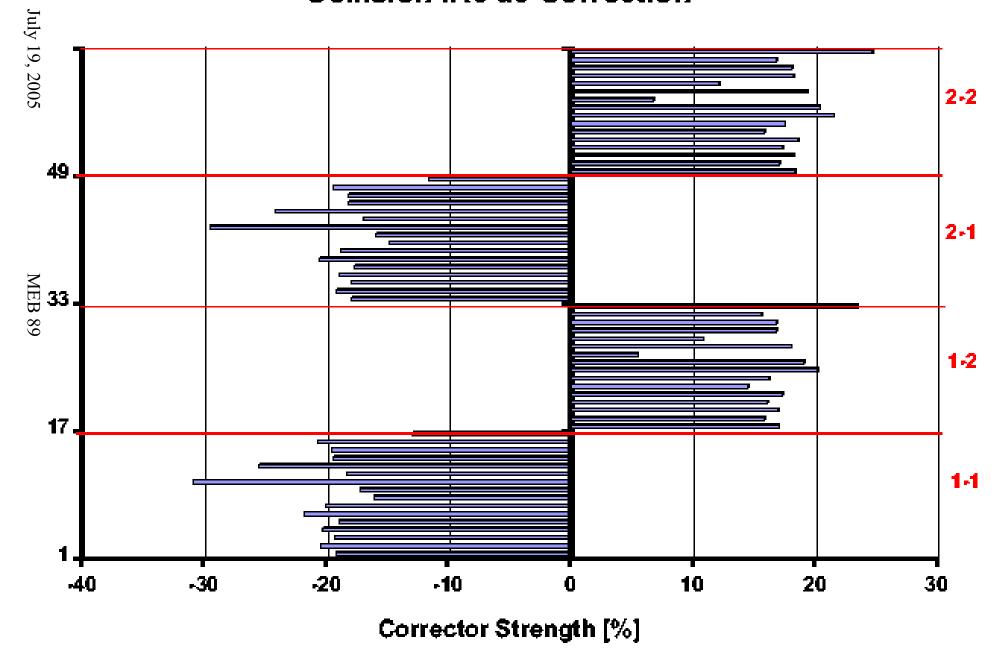
#### Collision IR8 b4 Correction



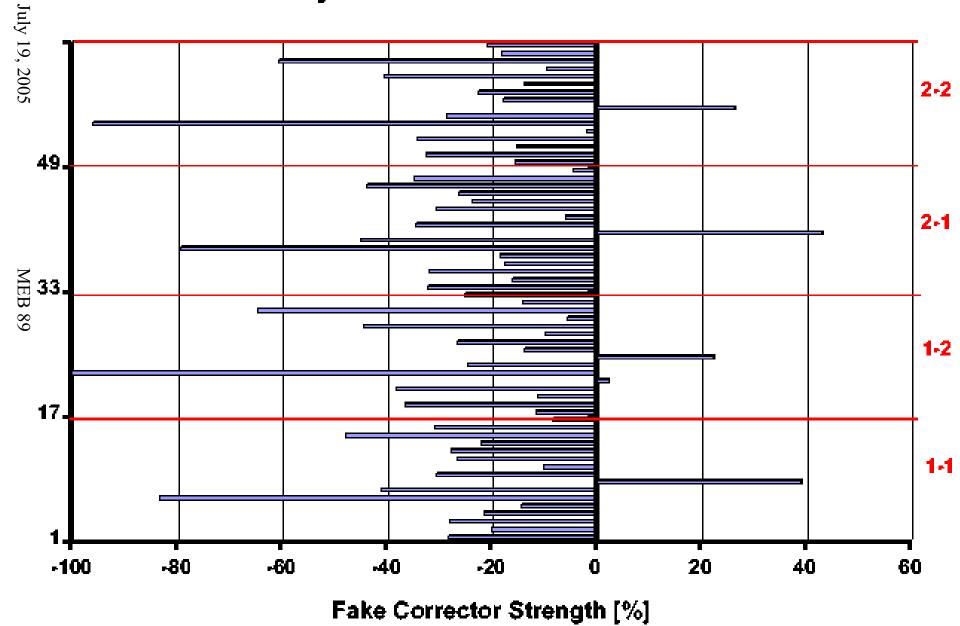
#### Injection IR8 a3 Correction

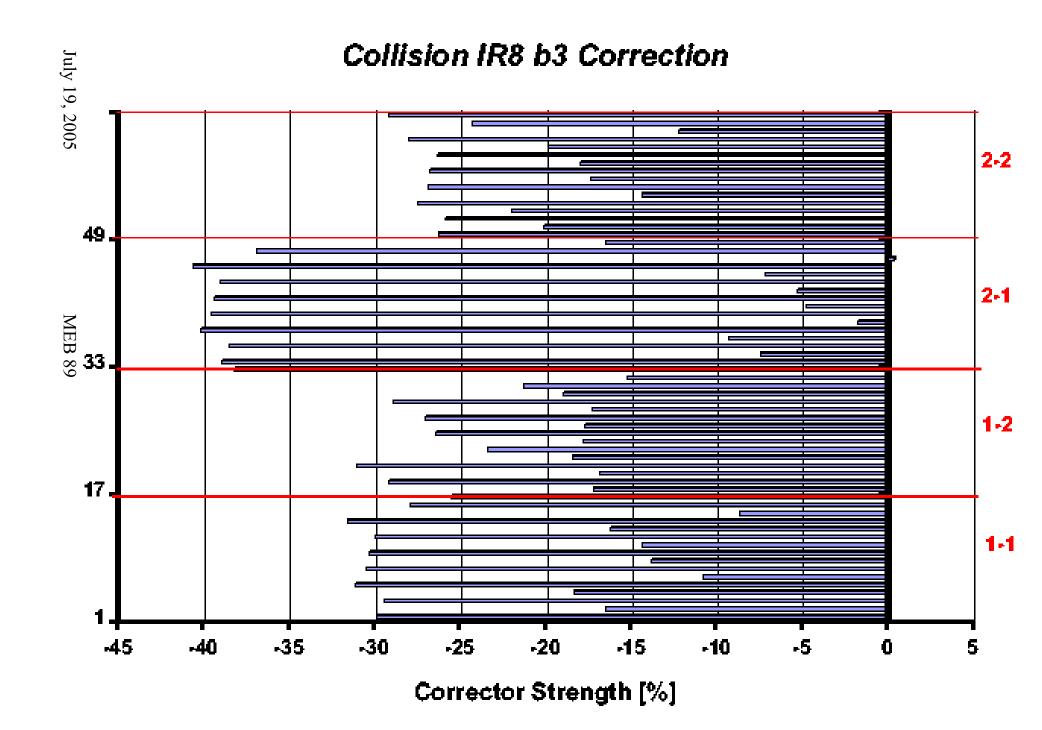


#### Collision IR8 a3 Correction



#### Injection IR8 b3 Correction





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