Beam line tuning
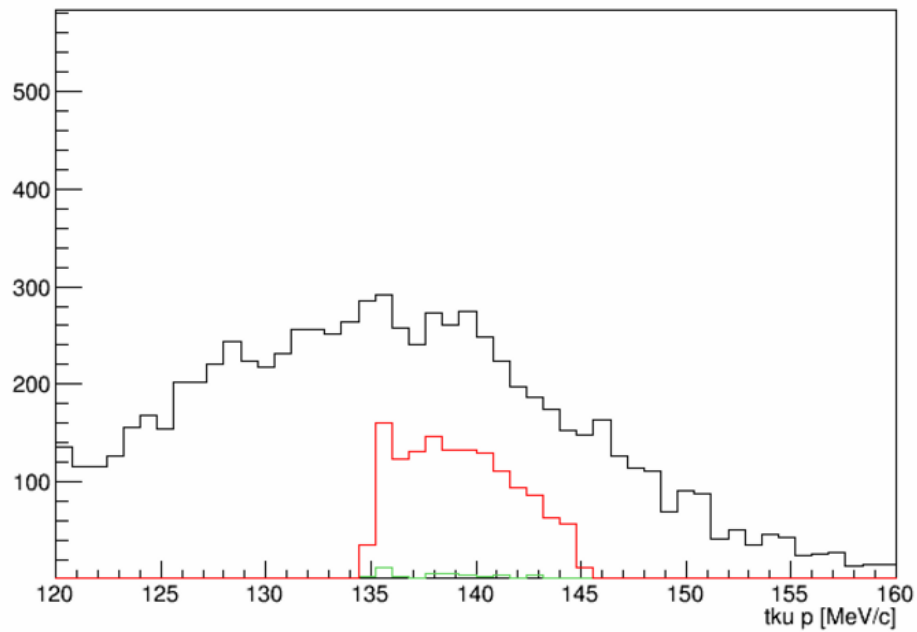
P.F, Chris R., Jaroslaw P.

MICE CM 49
3rd October 2017
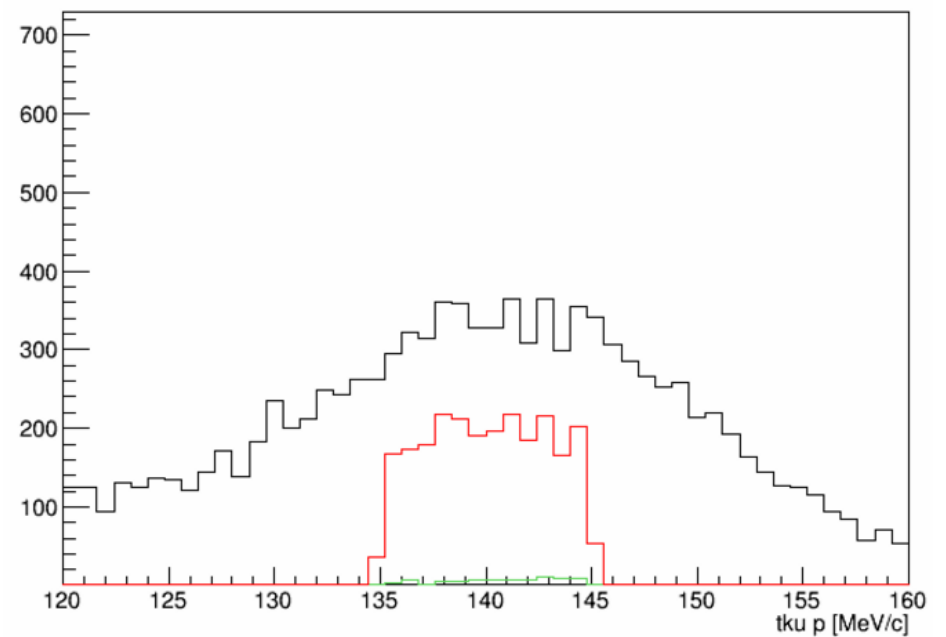
3-140

- Rescaling of D1 and of the last triplets

10-140

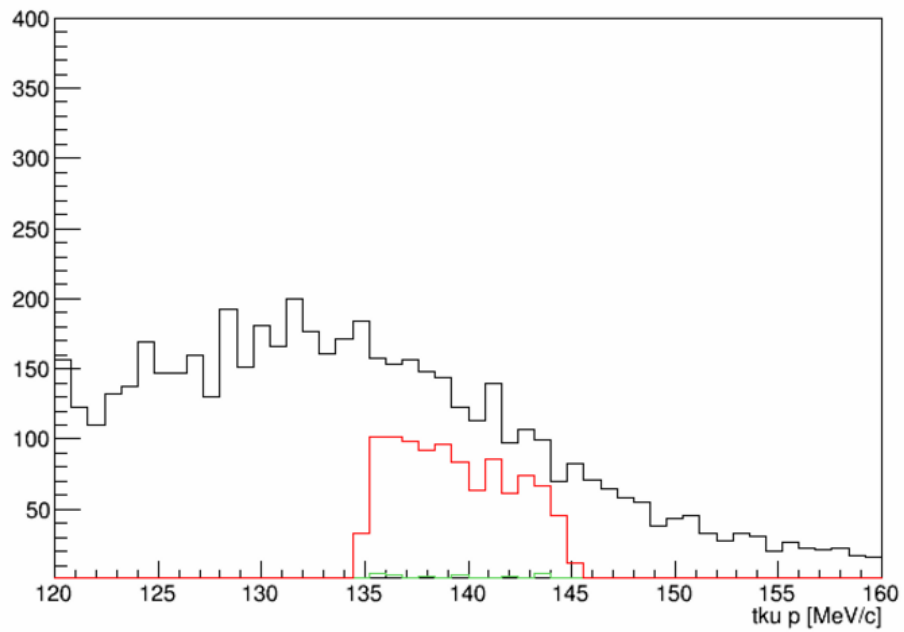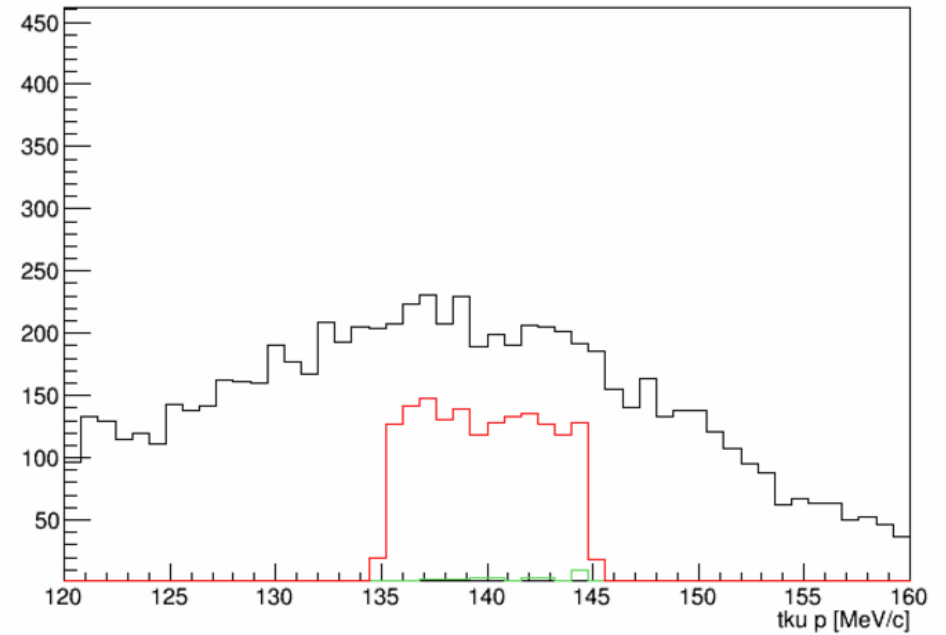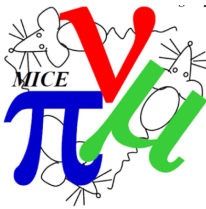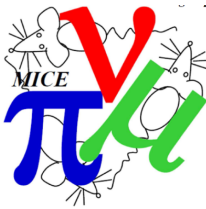2016-04 1.2 10-140-9638

2016-04 1.2 10-140-9640

More tuning

- Calculated a response matrix moving the current in the last 6 quadrupoles +/- 10% for the 140 and 200 MeV/c beams

- Few other iterations

- Alpha 4D goes down, while beta 4D stays the same
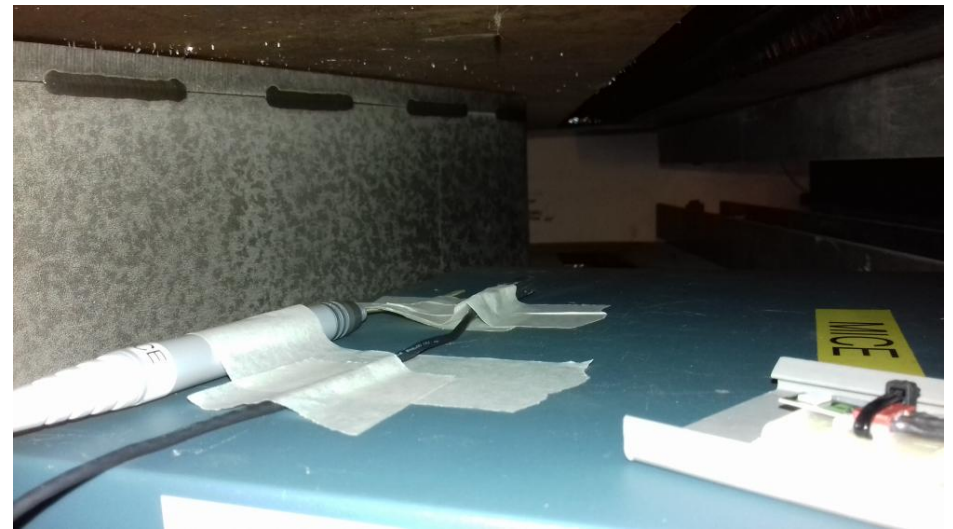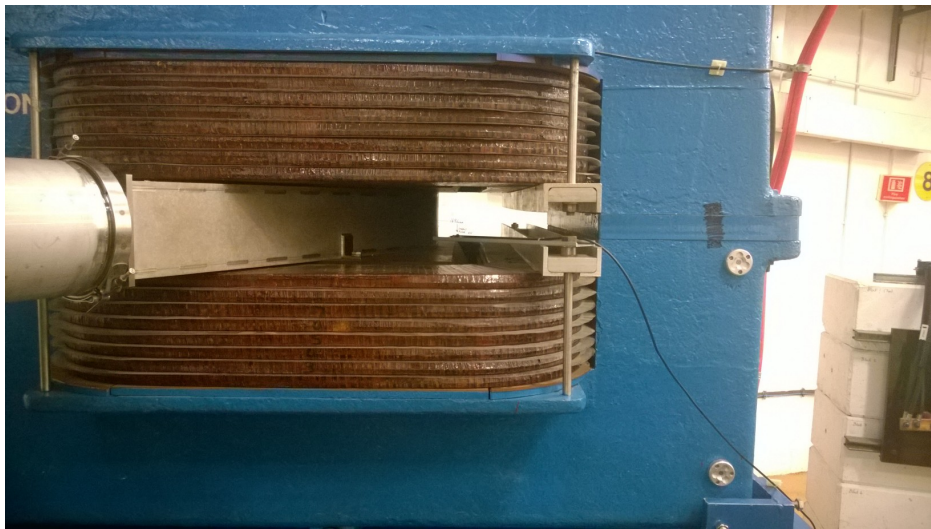

- Probably one more iteration

Beam line for M2D on

- Proposed cooling channel setting

- 4 mm – 140 MeV/c seems the more promising with a 2T field in the cooling channel

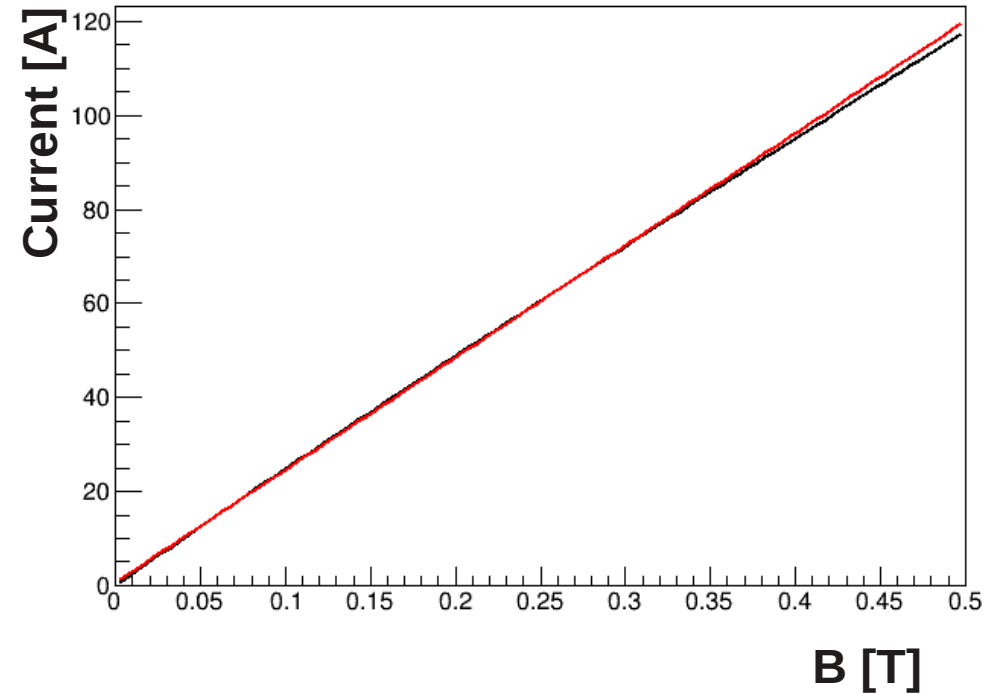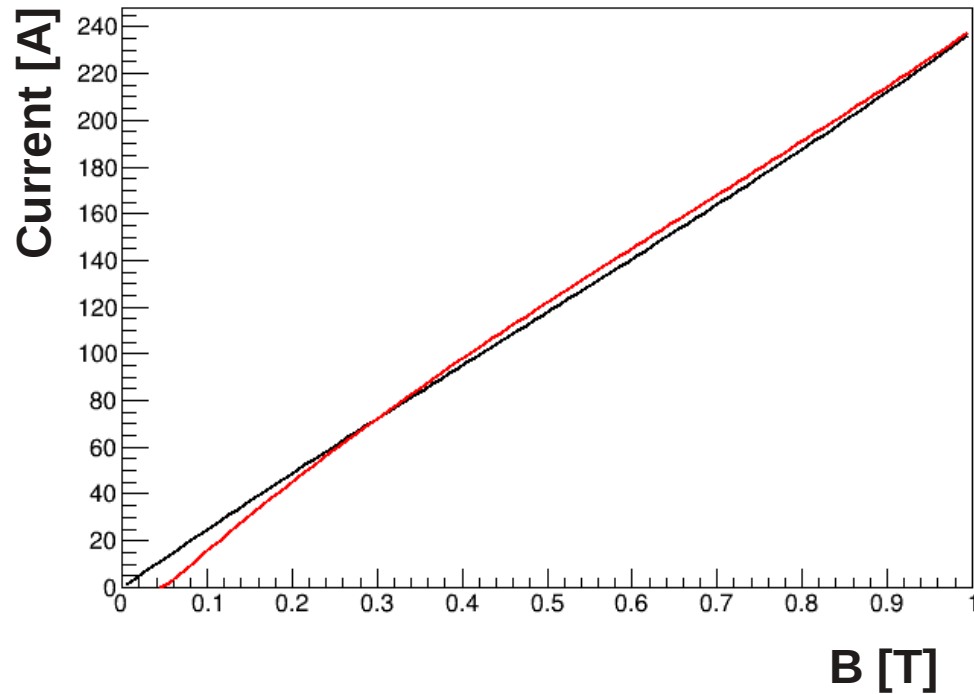- Few settings to be tuned later today
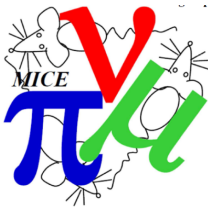
Survey of D1

Saturation curves

D1 — **Current function**
— **Surveys**
D2

- Corrections in the order of 2-3% required

Conclusions

- Few other iterations for a better matching

- Produce a 4-140 setting for the M2D channel

- Produce new MC G4BL datacards