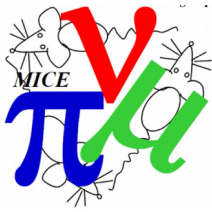


Dipole model

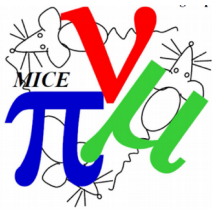
P. Franchini

MICE Analysis Workshop
May, 15 2018



Motivation

- Previous survey done by Henry in 2013
- Longstanding effort to understand/improve the MC



Summary of the surveys

- **D2**

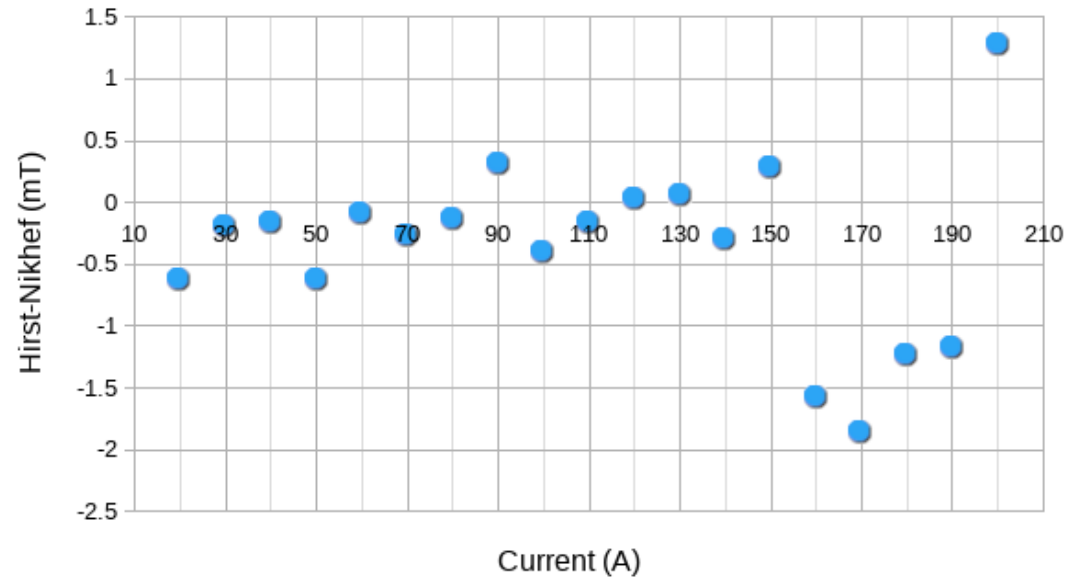
- First measurement of the field in Jan. 2017
 - 1 Hirst Gaussmeter (1 axis)
- Another one in Feb. 2018
 - 2 Hirst Gaussmeters (1 axis)
 - 1 Nikhef Hall probe (3 axis)

- **D1**

- Next week, inside the beam pipe

Validation of the probes

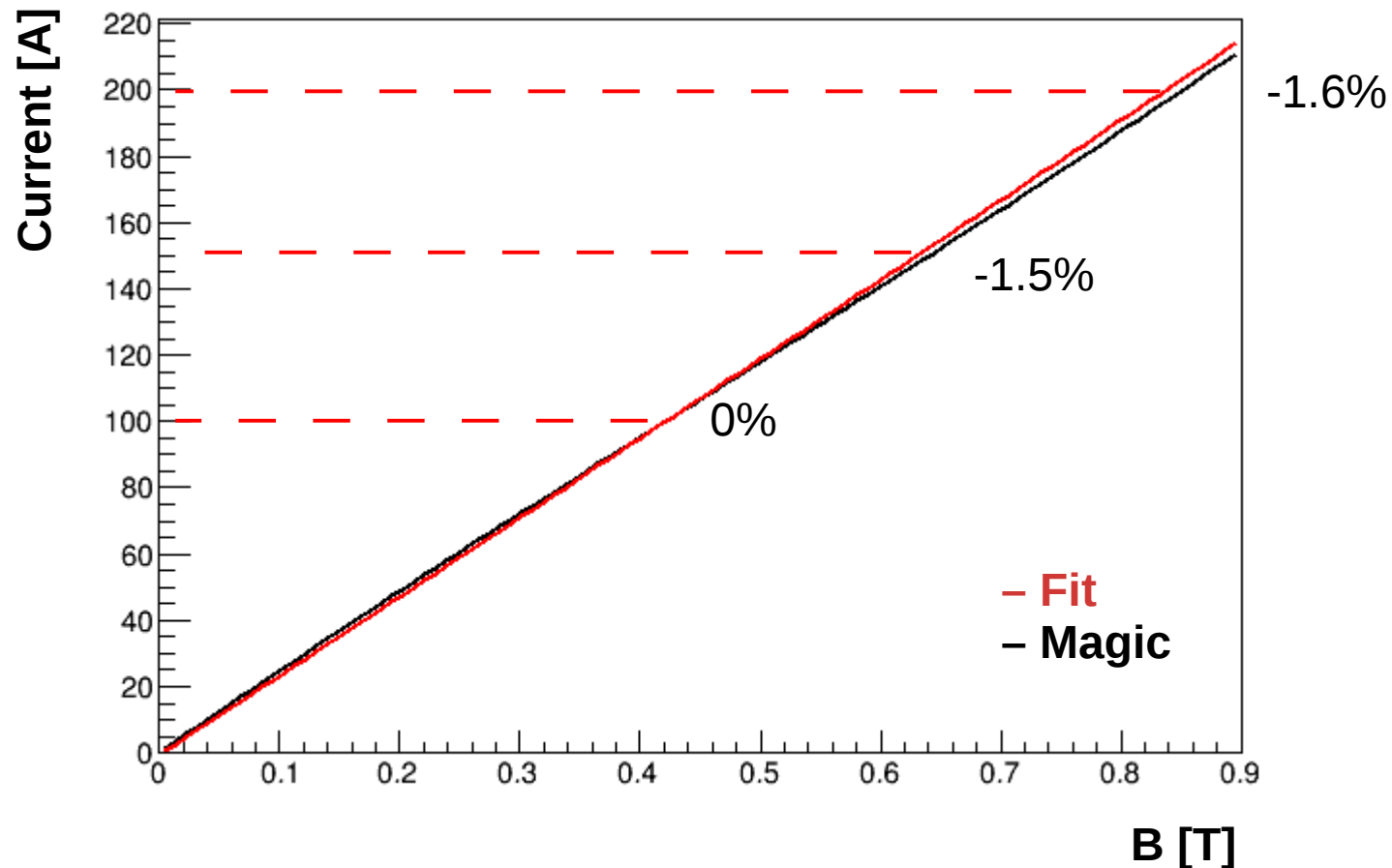
- Irrelevant discrepancies between the Nikhef Hall probes and the Hirst one (3D vs 1D)



- Long Hirst probe calibrated

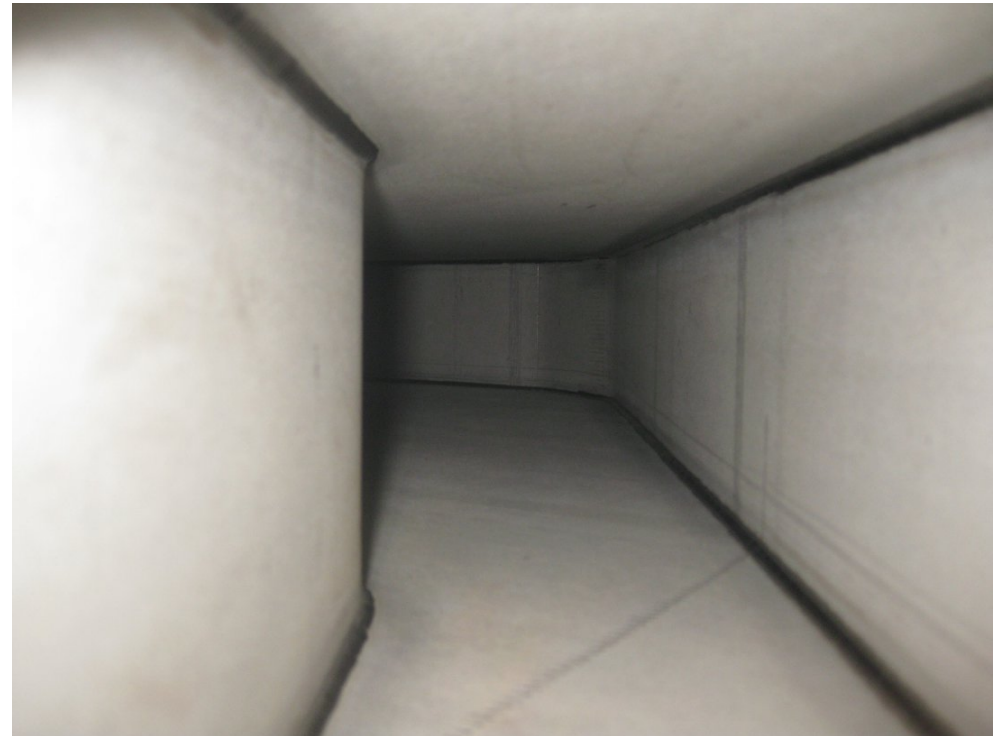
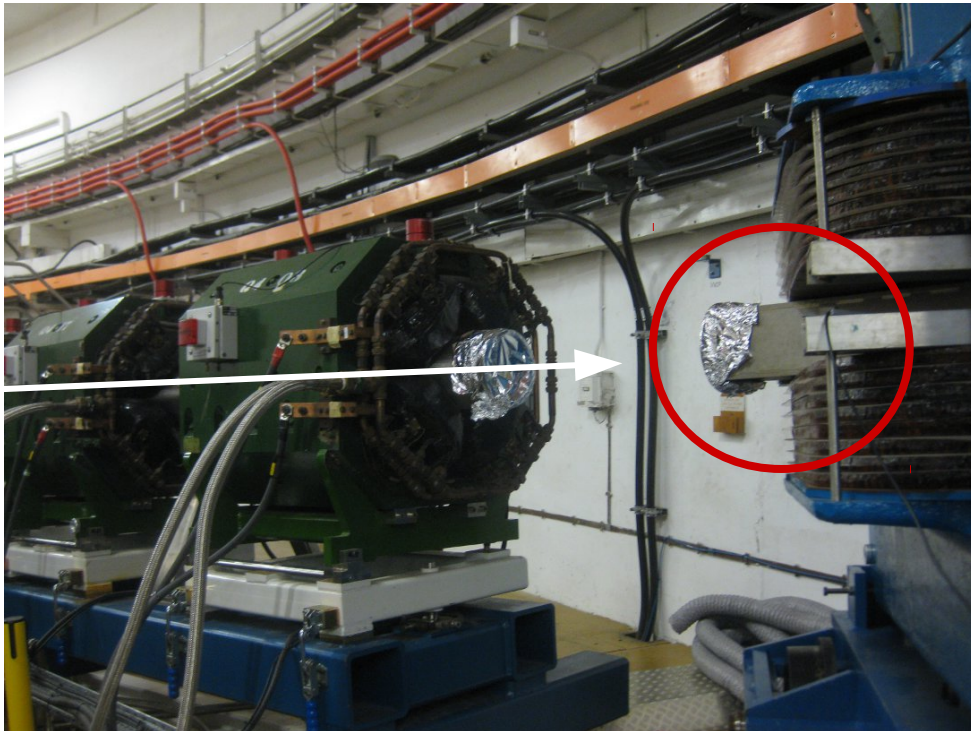
Dipole D2

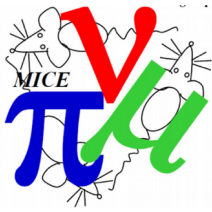
- Max discrepancy in the order of few percent



Dipole D1

- Preliminary measurement **outside** of the beampipe is compatible with the saturation curve of D2
- Will measure **inside** to spot any residual magnetization





Conclusion

- Waiting for a last survey of the D1 position to be processed
- Measurements and conclusions to be finalized in a **MICE Note**
- Provide **data-cards** for the most used beams