

# **System performance paper**

P. Franchini

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# Introduction

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- The paper will describe (**pragmatic list**):
  - The detectors installed in the hall
  - Performances of the detectors
  - Alignment of the detectors
  - Track matching
  - PID
  - Target model
  - Absorber model
  - Cooling channel field model



# Introduction

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- **The paper is coming along...**
- Defined list of contributors
- Agreed on a list of *beam line – cooling channel – absorbers* and common set of *runs*
- Available contributions merged together
- Skeleton of the paper in place
- Still elements missing for different reasons
- Eventual separate paper(s) for some other contributions

# Status of the paper



Main author(s)	Contribution	Text	Plots	Material	Notes
Viktor, Scott	TOF	Introduction	First version	on GitHub	
Tanaz, Paolo	Ckov	Introduction			
Domizia, Ludovico, Mariyan	KL	yes	yes	on GitHub	first draft ready
Francois	EMR	Introduction		agreed on 4/5 pages	
Melissa	Tracker	Introduction	some	on Overleaf	agreed on 5 pages
Scott, Melissa	PID				
Chris Rogers, Melissa	Track matching	yes	yes	on GitHub	
Francois, Paul	Detector alignment				<a href="#">MICE note</a> reviewed
Chris Hunt, Joe	Magnets				
Tom, Paolo	Target model				MICE note in progress
Ajit, Scott, Craig	Absorber model	Introduction			

# Status of the paper

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- Finalize the tracker part (Melissa)
  - Text for the low level analysis (digits, space points, ...)
  - Noise
  - Track finding efficiency and evolution
- Text for the TOF part on its way (Viktor)
- PID (Scott and Melissa)
  - All missed
  - Backup: plots available from other analysis

# Status of the paper



- Material coming from Francois in weeks (EMR, detector alignment)
- Target model (Tom, Paolo): MICE Note
- First version of the absorber analysis/validation (Ajit, Craig and Scott)
  - Craig working on the systematic studies for the energy loss
- Field model (Joe): nothing yet



# Conclusion

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- A first skeleton has been compiled with plots and text I have got
- First draft with *all* the material in time for the next October collaboration meeting
- If not, is going to be late
- Repository: <https://github.com/pfranchini/MICE-systems-performance-paper>
- Few more details:  
[https://micewww.pp.rl.ac.uk/projects/analysis/wiki/System-performance-paper\\_2018-06-25](https://micewww.pp.rl.ac.uk/projects/analysis/wiki/System-performance-paper_2018-06-25)