

K. Long, 21 February, 2019

#### **EXECUTIVE BOARD REPORT**

## **Executive Board Report**

- Three meetings since last Collaboration Board:
  - [2018-10-13], 2018-11-09, 2018-12-07, 2019-01-11
- EB activities:
  - Completed decommissioning activities
  - Supported Physics 'n' S/w&C Coordinators in organisation of analysis
  - Set conference, publication and project priorities
  - Liaised with Speakers' Bureau and its chair VP



### **Staff effort**

- STFC SPD (G.Blair, C.Jamieson) have made ~£25k available to support P.Franchini
  - Excellent!
  - 3 months support
- P.Franchini, S/w&C Coordinator:
  Will leave ... hand-over to P.Kyberd
- General bleeding of expertise/experience:
  - All remaining post-docs (with the exception of C.Hunt) now formally 50% supported on other projects:
    - End of C.Hunt's contract is in sight
  - Biggest issue: ensuring critical publications are published in a timely fashion

#### **DELIVERING THE MICE LEGACY**

# Papers

Title	Contact	Target date		Comments
		Preliminary	Final	Jan-19
Phase-space density/emittance evolution; rapid communication	C. Rogers	Apr18 w/s	Apr19	4th referees meeting before around CM53 (21, 22Feb19, RAL)
Measurement of multiple Coulomb scattering of muons in lithium hydride	J. Nugent	Jun18; CM51	Apr19	Unfolding issues; perhaps resolved; CM53, 21,22Feb19, RAL
Performance of the MICE diagnostic systems	P. Franchini	Feb19; CM53		Almost complete draft
Phase-space density/emittance evolution review paper	C. Hunt	TBD		Analysis now advancing
Phase-space density/KDE/6D-emittance evolution	C. Brown	TBD		Thesis published on initial analysis; taken over by C.Brown
Measurement of multiple Coulomb scattering of muons in LH2	J. Nugent	TBD		Awaits completion of LiH paper
Field-on measurement of multiple Coulomb scattering	A. Young	TBD		Analysis underway
First particle-by-particle measurement of emittance in the Muon Ionization Cooling Experiment	V. Blackmore		Jun18, CM51	Accepted by EU Phys. J C; awaiting referees
				RAL-P-2018-007; 1812.02674;
The MICE Analysis and User Software framework	D. Rajaram	May18 w/s	Jun18, CM51	submitted to JINST; referees comments received



- Agreed with STFC to work together to publicise the MICE legacy at the time of the submission/publication of first cooling results in Nature Physics
- Examples of impact to bring forward:
  - Scientific:
    - Papers, conference proceedings, theses, talks, ...
  - Impact:
    - Direct:
      - E.g. g-2 ring may use wedge absorber to improve beam
    - Legacy:
      - Muon Collider, nuSTORM, novel neutrino-beam discussions in ESPPU
    - Impact:
      - Investment in high-tech, UK, local, EU and other industry (quantifiable);
      - Outreach (e.g. national competition for schools organised on the back of Neutrino 2016)
      - Trained personnel: technical, engineering (cryo, mech., elec, electronic, s/w), analysis, accelerator scientist
- Topic for EB tomorrow; please be ready to become involved

#### **NEXT COLLABORATION MEETINGS**

# **Future meetings**

- 2019:
  - CM53:
    - February 2019: 21st and 22nd February 2019
  - CM54:
    - June 2019: 27th and 28th June 2019
  - CM55:
    - October 2019: 24th and 25th October 2019
- Analysis workshops:
  - April 16<sup>th</sup> 17<sup>th</sup> in Glasgow
  - Subsequent meetings to be announced by C. Rogers
- Video conferences:
  - 11Apr19
  - 09May19