From MICE CM26 to MICE CM27

The International Muon Ionization Cooling Experiment
+TOF paper was published.
+ we should prepare first MICE collaboration paper
Marco Apollonio has agreed to edit STEPI paper ➔
First MICE paper with full author list

+ we have taken quite a few data in 2008 and 2009. Book-keeping and data quality record has become an issue.
Linda Coney has agreed to take responsibility for this.
effort launched!

+ new collaborators
Welcome in MICE to Uni Chicago!
STRUCTURE & authors for relevant parts

Beam Line Introduction [MA]: wrap up of old docs + recent
- Magnet Characterisation [MA]

The Target [$\Gamma^3$]: short, already writing a NIM

Detectors [relevant experts]: brief description of devices
- MB, YK, … [TOF]
- LC, DS, VV [Ckov]
- AB [BPM]
- LT, Mbo [KL]
First Tests & Results [JSG+…]

Optics [MA]
- Analysis of data (Q123 scan / Dsol scan / Proton Absorber …)

Dipping tests [AD]

The (e,P) matrix
- introduction  [MA]
- optimisation of the line [MA]
- emittance/momentum determination from data [MA, MR]
Important discussions/decisions to be had/made at this collaboration meeting:

**discussion on “MICE Computing Requirements”**
This has caused considerable disruption with HEPLNW17 computer crash and tightening of access restrictions at RAL. Emphasizes:
A. personnel in MICE charged with support is very thin!
B. difficulties understanding host/guest relationships
C. Issues of data transfer, where do we perform computing, etc…

Successful discussion.. thanks to Linda and the panel!
Computing Panel Summary

1. MICE Computing Requirements Document is written
   - Many thanks to Malcolm Ellis, Paul Kyberd, Henry Nebrensky for starting this

2. Replicate Functionality of heplnw17 - three new servers in R1
   - MICE SSH Bastion to be installed on PPD Network
     - Provides controlled expert access into RAL site → then MiceNet
     - Copy files out (ie. Data), x forwarding
     - Same access as heplnw17 (same agreement with RAL)

   - Web Services Machine to be installed on PPD Network
     - eLOG installed on it
       - ON PPD NETWORK → Least possible downtime
       - MICE have direct access & Global MICE read/write access
     - User interface (API) installed for Database

   - Database Machine to be installed on PPD Network

3. Negotiations to be made with PPD to formalize the informal agreements that have already been reached to allow long term official IT support of MICE machines on PPD network.

4. Assign responsible MICE to serve in newly defined roles (see document).

5. Solidify plan to ensure appropriate backups for machines/systems (see document).

6. Determine need/strategy for analysis machine/farm

7. Investigate Federal IDs for on-site WiFi access and maybe access MiceNet from outside RAL.

Linda

implementation and prioritization to be discussed at EB
**HOMEWORK at CM26**

schedule review at CM26  
each level III WBS manager has been requested to provide revised schedule for discussion at TB meeting on Wednesday 24 March

Conclusion will be presented by Andy to plenary meeting on 27 March

Comments: this is a necessary and sometimes painful exercise.  
Thanks Andy for assuming this “bad cop” role in a very positive spirit!

Please support and help Andy in his efforts!
MICE Schedule as of Dec 2009 will be re-issued when situation is clearer with SS's

Run date:
- (running now) -> Aug 2010
- Q2/Q3 2010
- Feb 2011
- Q3 2011
- 2012-2013
- ≥2013
Absorbers for steps III.1 and IV

- Wedge for longitudinal emittance study
  -- proposal by Pavel Snopok
  -- discussion by Bob Palmer

- towards a full description of the Step III.1 and Step IV program
understand in particular the practical issues with absorber change in
the StepIII.1 vs Step IV

Useful exercize! it seems that we will stick to foreseen steps.
LiH absorber now compatible between STEPIII.1 and IV
Opportunity to have Wedge LiH fabricated will be taken
we should have a proposal for absorbers in plastic and other materials
How to fix them in AFC module devised (Wing)
Full measurement of Landau function seems difficult/marginal (Cobb)
Spectrometer Solenoid reached ~full current ... but lost a Matching Coil ...

this will unavoidably delay step II & III
also calls into question either concept or execution of magnet

⇒ something to learn for other MICE magnets.
tests will continue (as well as thermal and He consumption measurements)

MICE more global approach to magnets has been discussed

⇒ more at EB today

Alain Blondel  MICE collaboration meeting CM26 Riverside March24-27 2010
Not to forget: reports on beautiful technical progress and analysis results from 2009 data!

RF cavities construction and measnts

Dust around bearing, lock ring removed

this target had 2.16M activations

$S_{11}$ measurements

$S_{21}$ measurements
Not to forget: reports on beautiful technical progress and analysis results from 2009 data!

Diffuser in G4MICE

We now have REAL beam for simulations

TOF reconstruction efficiency at high rate to be investigated!
Calendar of VCs: (to be published after EB meeting)

draft Video conferences Calendar from Linda
normally, TB on Monday and EB on Friday of same week

April 22
May 12-13 posters for EPAC
May 20
June 17  -- but within Neutrino 2010
MICE CM27 July 7-10, 2010 - RAL

August 12
September 2
MICE CM28 Bulgaria October (3-8) 2010 - Sofia

Oct 28
Nov 25 (I think this might change as I'm pretty sure it's
Thanksgiving..)
Dec 16

+ MICO every Monday! (subsystem responsi-mice to attend or delegate!)

⇒ request to modify time of VCs to improve attendance from US-west

talk to you soon!

Alain Blondel  MICE collaboration meeting CM26 Riverside March 24-27 2010
MERCI!

All MICE members for attendance
great presentations,
hard and intelligent work.

we continue making progress
towards demonstration
of ionization cooling

Rob Fletcher, Barbara Simandl
Linda Coney, Gail Hanson, Pavel Snopok
for inviting us to Riverside
and great meeting organization!