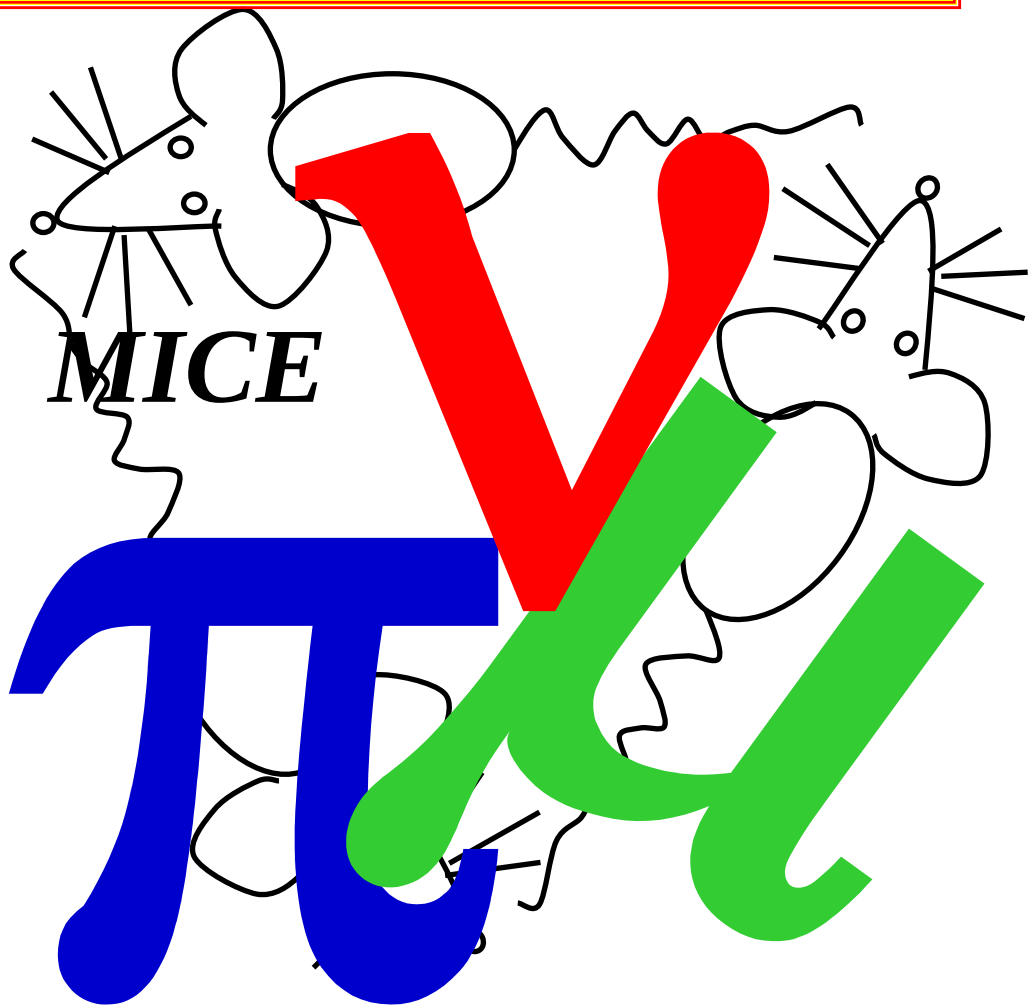
# Welcome to MICE CM27




# GOALS OF THE MEETING

# MICE is now taking data for step I

Measurement of muon beam properties:
rate per beam loss, alignment, emittance,
sensitivity to upstream beam line

This running period will last until 15 August and will have covered 4 MOM's reigns

THANK YOU TO ALL MOMS, SHIFTERS, BLOCS AND SUBSYSTEMS ON-CALLS
NOTE THAT THIS RUNNING PERIOD IS BRINGING NEW FACES TO MICE
in spite of some ("*ç%&/()=) difficulties with immigration:
WELCOME TO YOUR FIRST COLLABORATION MEETING

Also: this is a great success of teams on charge of
-- target
-- beam line
-- decay solenoid
-- infrastructure
-- detectors
-- online monitoring and control room
-- infrastructure and hall

last to be concluded: PPS

## STEP I to do at this meeting:

-- Review data quality and issues of DAQ, monitoring, etc... what remains to improve?

-- Look at issues raised in previous running (saturation, dead time)

-- Have a closer look at PID present (TOF, CKOV, KL) and future

Prepare for step I MICE publication!

## Are we happy with analysis environment ?

access to code and data, data quality indicators, data base/data relationships,
Online reconstruction vs off-line reconstruction, etc…

# STEP II, III IV

2. monitor progress towards step II and III

Spectrometer solenoids -- where do we stand. Progress towards solution?
Diffuser
EMR (mechanics, electronics)

3. progress towards step IV

absorber bodies windows and focus coils
progress towards LH2 infrastructure
LiH wedge?

We will need upgrade of hall power for step III …
status of power station upgrade and other infrastructure

## 4. towards steps V and VI

Preparation of cavities,
Coupling coils
RF power sources at DL

Should we start worrying about monitoring?

New idea: Test of MICE RF cavity in magnet at CERN?

# Establishing schedule

**At CM26 we had a successful schedule discussion:**

**-- schedules were concatenated at the technical board**
**-- discussed in the progress talks**
**-- presented to collaboration on last day**

**Will do the same this time.**

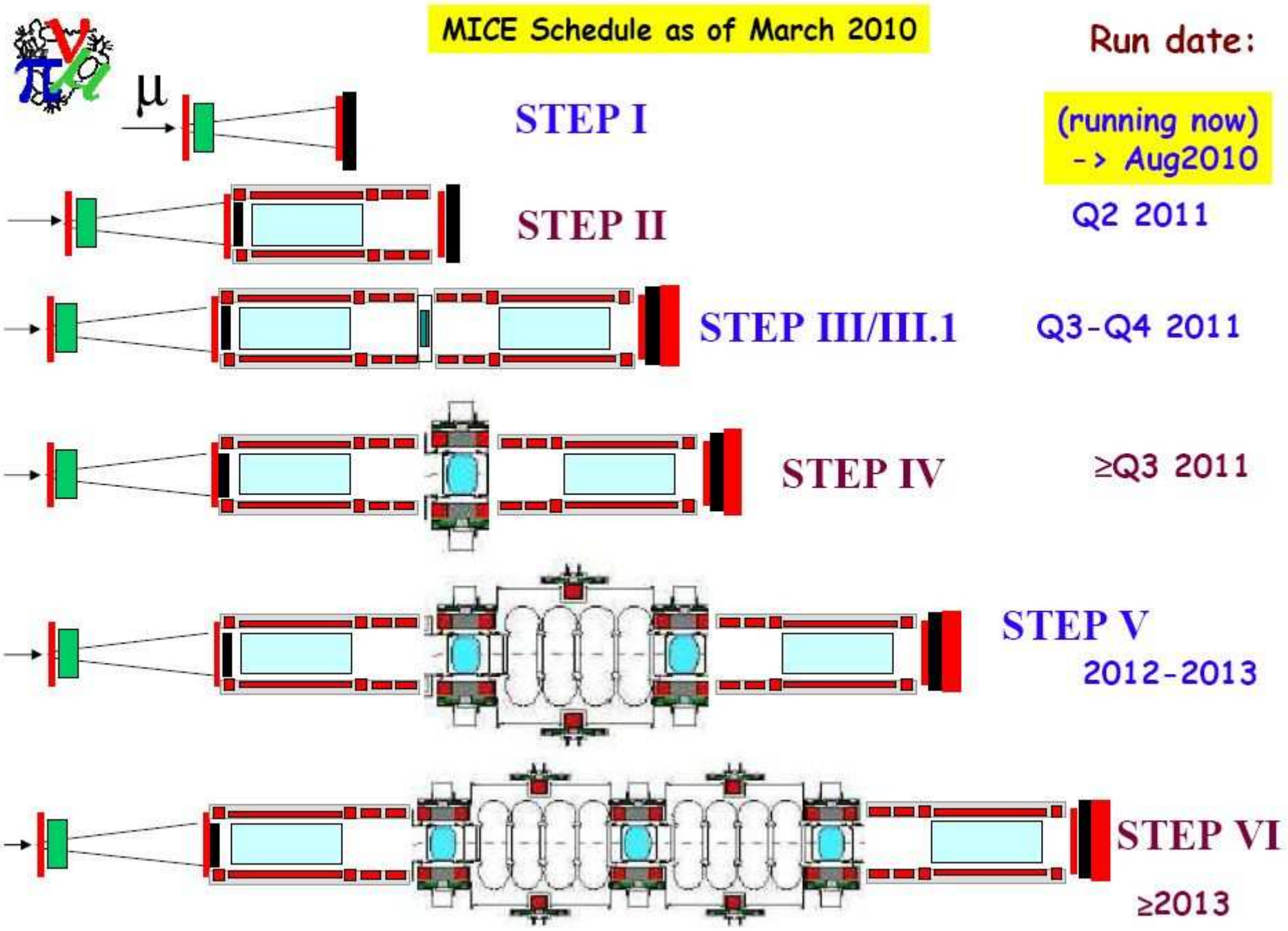
**However:**
**uncertainty for step II and III lies in spectrometer solenoids (SSI, SSII)**

**-- we are close to having magnets that work! (almost but not quite!)**

**We still have not understood what broke on SSI (Magnet2)**
**and what exactly needs to be done to fix it and make sure it works next time.**

**-- what about magnet I?**

**Working on scenarios to reinforce the team.**


MICE Schedule as of March 2010
Run date:
μ
STEP I
(running now)
-> Aug2010
STEP II
Q2 2011
STEP III/III.1
Q3-Q4 2011
STEP IV
≥Q3 2011
STEP V
2012-2013
STEP VI
≥2013

## Next conferences:

Vassil and Yordan will have two posters at the ICHEP 2010 22 July

We should think/agree of 'official MICE plots' to be included in the posters

MICE project board (new scheme) will take place 23 September 2010

should organize report and schedule

➔ thank you to all who contributed to MICE report to FAC in April:

http://mice.iit.edu/micenotes/restricted/pdf/MICE0288/MICE0288.pdf

Funding Agency Committee will take place 15 October 2010

Set goals for next collaboration meeting CM28: Sofia 3-8 October

# OUTLOOK

MICE is an important step in making a Neutrino Factory or a Muon Collider an option for the future of particle physics.

The MICE collaboration is pursuing the goal of demonstrating that the technique of Ionization Cooling can be realized in practice, by constructing a cell of ionization cooling and measuring its performance in a variety of configurations.

We have had a number of difficulties and so far have surmounted them all. At the moment: the spectrometer solenoids.

We are taking data for step I, establishing that we have both intensity and beam quality to realize the measurements.

The performance of the detectors and the beam is as good as in the proposal

- so we are confident that the goals of MICE will be achieved!