

Draft minutes of the  
**ILIMA COLLABORATION BOARD MEETING**

**Place:** GSI, Atomic Physics meeting room

**Start:** March 02, 2010, 10:00 AM

**Minutes:** Yuri Litvinov

**Present:** P.M. Walker, Th. Faestermann, H. Geissel, C. Kozhuharov, Yu.A. Litvinov, W.R. Plass, C. Scheidenberger, M. Steck, D.M. Seliverstov, H. Weick

-----  
AGENDA FOR ILIMA COLLABORATION BOARD MEETING

2nd March 2009 at GSI

10 am, Atomic Physics meeting room

1. Apologies and membership
2. Minutes of meeting on 10 December 2009
3. Matters arising
4. FAIR/NuSTAR status
5. Project Manager's report
6. Financial matters
7. Conferences and workshops
8. Web pages
9. AOB
10. Date of next meeting

- 
1. Apologies and membership

Apologies: K. Blaum, S. Goriely, Z. Patyk

Membership:

(a) Z. Patyk has agreed to become the leader of the physics group

(b) Discussion on the new members:

H.G.: The list should be informal. Many students leave the field after their PhD.

H.W.: There should be an official list

C.K.: Groups and institutions should check the member list

P.W.: ILIMA is an open collaboration

Yu. Litvinov shall prepare the actual list of collaboration members and send it around to representatives of the participating institutes.

(c) Matt Reed (Uni. Surrey) has been unanimously accepted to become a new member of the collaboration

2. Minutes of meeting on 10 December 2009

Minutes from the last meeting were accepted without corrections.

**3.** Matters arising

4. FAIR/NuSTAR status

Yu. Litvinov reported on the meeting of the FAIR joint core team with spokespersons of FAIR experiments.

Meanwhile there are minutes of the meeting available which are attached to these minutes .

H.W.: The official version of Green paper is different from the White paper.

Below is the email from Helmut with the link to the Green Paper and a short summary.

-----  
Hello,

here is the pdf file and also a link to the GSI document server

<https://www.gsi.de/documents/DOC-2009-Nov-124-1.pdf>

In the overview Module 3 is "also for Nustar ring physics",  
but in table 1 under Module 3 there are no words on CR for mass measurements only  
PANDA.

About CR and ILIMA in the Nustar part:

"Module 3 contains among other items the construction of a storage ring, the CR. A world-wide unique feature of the NuSTAR programme at FAIR is the ability to perform experiments with stored radioactive ion beams. The current successful programme of the FRS-ESR facility at the GSI underlines this fact. With the much higher production rates of the Super-FRS and the efficient injection and collection in the CR a unique and world-leading component of the NuSTAR programme, namely the ILIMA experiment can be started, allowing for direct mass measurements of hundreds of nuclei with half-lives in the millisecond region, half-life experiments on highly-charged exotic ions and studies of long-lived isomeric states. A highlight will be the measurement of r-process nuclei responsible for the A~195 abundance peak, for which no nuclear data exists so far."

and no words on RESR or NESR anymore in this part.

The time table for construction is also included in the green paper, but still with "ready for operation", but Boris Sharkov has already changed the title to "ready for installation".

Best regards,  
Helmut

-----  
Status of the CR.

In view of the modularized version of FAIR, a new design of the CR ring has been prepared. The CR has a different extraction and kickers.

H.W.: Positions for the two ToF detectors have been changed. The distance between the detectors became shorter. Extraction line and the setup of one ToF detector can be in conflict and have to be checked.

M.S.: Place in the CR is a big issue.

Present ESR.

H.G.: ESR shall stay. There is a list of modifications in the mid-term future for the ESR (full aperture kicker, moving of the ESR to allow better injection from the FRS, etc.) The list has been presented by C.S. to the GSI directorate and NuSTAR board.

H.G.: Christoph can prepare and present the modifications at the next ILIMA CB meeting.

T.F.: We shall consider the ILIMA program at the ESR: Pre-LIMA

P.W.: Can be started at the ESR but the need of the NESR has to be always emphasized.

5. Project Manager's report

The project manager's report has been skipped since the same presentation is to be given in the open part of the meeting in the afternoon. The presentation is attached to these minutes.

## 6. Financial matters

Germany:

W.P.: Has some money from BMBF for ILIMA

Russia:

D.S.: The financial situation in Russia is not certain. The sources for financing FAIR have been defined on February 10. RosAtom will support CBM and Panda (PNPI contact is Alkhazov). Support for NuSTAR is not clear.

PNPI belonged to Russian Academy of Science (RAS) until very recently. Now there is a big re-organization to form a national nuclear centre independent of RAS. The centre contains Kurchatov Institute, PNPI, and Obninsk. The centre shall get support directly from the government, however, what is the funding volume is not yet clear. Presently the RAS has decreased the support by 30%.

PNPI arranges work with own funds mainly for EXL detectors. Decay detectors for the ILIMA can be considered.

The situation shall become clear by summer 2010.

U.K.:

P.W.: U.K. does not get shares of the FAIR company. Some money are available for R3B, DeSpec and HiSpec.

Poland:

Y.L.: The situation in Poland is stalled until the FAIR is signed.

FAIR:

H.W.: About 12 MEuro is promised for FAIR experiments. The distribution is not clear yet.

11:20 C.S. joins the meeting

C.S.: An intermediate upgrade program of the FRS-ESR for about 5 MEuro has been proposed. This year, there is no chance to obtain money. The discussion with the German ministry is ongoing.

GSI directorate supports AP and NP communities and realizes the importance to keep them together. In addition to "standard" experiments at the ESR, the new types of experiments shall be pursued in the future, e.g. the reaction experiments as EXL or, suggested by Phil Woods, (p,t) experiment. Intensity of stored radioactive beams has to be increased.

M.S.: Not only money are missing but also the manpower.

P.W.: As the ILIMA spokesperson, can formally express the interest to the GSI directorate in supporting the upgrade program.

## 7. Conferences and workshops

ILIMA is represented at the NuSTAR annual meeting by several talks.

N. Winckler is invited to give a talk at the TCP conference in Finland.

Yu.Litvinov is invited to give presentations at the IOP conference in Edinburg and at the HCI conference in Shanghai.

P. Kienle is invited to give a presentation at the EURORIB conference at CERN.

## **8. AOB**

### 9. Date of next meeting

NuSTAR meeting is planned about 1/2 year later.

FRS user meeting will take place in autumn.

The CB meeting can be scheduled to match one of these meetings. The decision on the date and the place will be taken later.