

Minutes of the 51st Machine-Time Committee Meeting

Date and time: January 20, 2012; 13:30–15:50

Place: RIBF Bldg., Room 203

Attendees: Sakai^a (Chair), Aoi^{c, †, ‡}, En'yo^{a, †}, Haba^{a, †}, Kamigaito^a, Kase^a, Kubo^a, Kubono^b, Nishimura^{a, †}, Sakurai^a, Shimoura^b, Ueno^a, Uesaka^a, Uwamino^a, Wakasugi^a, Yamaguchi^{b, †}

Absent: Abe^a, Fukunishi^a, Morita^a, Motobayashi^{a, †}, Suda^{c, †}, Yoshida^{a, †}

^aRNC / ^bCNS / ^cRIBF-UEC / [†]Observer / [‡]TV Attendee

(in random order)

Reports

1. Change of the beam time schedule (Ueno)

- DD11-02 (Giuseppe) has been canceled in response to the request from the spokesperson.
- NP0906-LINAC01-03 (Asai), which was tentatively scheduled for February 1–10 depending on the status of beam development, has been canceled due to the much lower current of a ⁵⁰Ti beam extracted from the ion source in a test than previously requested. The RILAC beam time (BT) from January to March has been rescheduled due to the cancelation.

Details of the changes are as follows:

Experimental-Program-Number	previous	changed
<u>AVF stand-alone</u>		
DD11-02 (Giuseppe)	Feb/13/09:00 – Feb/13/15:00	→ <i>cancelled</i>
<u>RILAC stand-alone</u>		
NP0906-LINAC01-03 (Asai)	Feb/01/09:00 – Feb/10/ 9:00	→ <i>cancelled</i>
NP0702-LINAC12-15 (Morita)	Feb/01/09:00 – Jan/29/ 9:00	→ Jan/15/09:00 – Feb/10/ 9:00
NP0702-LINAC12-14 (Morita)	Feb/27/21:00 –	Mar/12/09:00 –
ML1006-LINAC27-02 (Haba)	<i>cancelled</i>	Mar/ 2/09:00 – Mar/ 8/ 9:00

2. RIBF operation (Kamigaito)

- In the ¹²⁴Xe beam series performed in December, 2011, 85 % of the requested BT was supplied by the beam delivered at $I_{ave} \sim 8.5$ pA on average. In this series, fixed-type foils were utilized as the first- and second-stage strippers. It was also reported that the endurance time of the second stripper foil was so short that it was changed a few times every day.
- As reported in the previous meetings, a layer short has occurred in the RRC coil. Preparations for its repair work, i.e., changing the RRC coil, are underway. The Accelerator Group plans to do the repair work during this summer. However, if the repair is urgently required, it should be done from mid-May.

3. Call for BT scheduling requests for the first half of FY2012 (Ueno)

- The call for BT scheduling requests for the first half of FY2012 has started since January 11 (deadline is January 24). Taking into account the plans of MS (facility's BT in the Machine Study category), constructions, and repair works discussed after the previous meeting, it was announced

that only ^{48}Ca and ^{124}Xe primary beams will be scheduled for the SRC-use experiments for the first half of FY2012. The BT scheduling timeline is as follows:

- Jan. 11–Feb. 24: Call for BT scheduling requests & detector development BT requests
 - Mid-Feb.: Tentative BT schedule
 - Feb. 16: Approval of BT schedule by the MT Committee
 - Mid–End of Feb.: Submission deadline of Accelerator Use Planning Sheet (AUPS)
 - Mar. 13: In-House Safety Review Committee meeting
 - Mar. 14–End: Modification of the accelerator-use plan and re-submission of AUPS by the spokespersons in line with the suggestion from the Safety Review Committee
- If it becomes apparent that beams would not be delivered at all at the requested current due to the above noted layer short of the RRC coil, the repair work of the RRC coil must be done from mid-May by suspending the RIBF operation. The repair work will take three weeks. This decision will be made based on the beam conditions for the NP0912-RIBF34-02 (Sekiguchi) experiment scheduled for February 21–27 (the beam acceleration starts February 14). If urgent repair is required, the BT schedule for the first half of FY2012 will need to be re-planned starting from the end of February.

4. Status of the PAC meetings (Ueno)

- NP-PAC
 - 10th NP-PAC: All procedures have been completed with a summary report prepared by the secretariat office sent to the directors of RNC and CNS on January 18.
 - 11th NP-PAC: The dates of the 11th meeting were set to June 18–19, 2012. Following the PAC meeting, International RIBF Users' Meeting will be held on June 20–21.
- 9th ML-PAC & 3rd In-PAC: under preparation

Topics discussed

1. Approval of the minutes of the previous meeting (Sakai)

2. Calculation of BTs of BigRIPS-related experiments conducted in October–December (Sakai)

Actual BTs of the BigRIPS-related experiments in the ^{238}U and ^{124}Xe beam series from October to December were reported (Ueno). After discussions, the BTs spent were calculated as follows:

- NP0702-RIBF30-04 (Yoneda) : 10 days
- NP0702-RIBF31-04 (Aoi) : 3 days
- NP1012-RIBF63-01 (Sumikama) : 0 days (BT was canceled)
- NP0702-RIBF09-01 (Lewitowicz) : 1 day
- NP0702-RIBF11-06 (Nishimura) : 0 days

3. MS proposals still under discussion (Sakai)

Two BT requests in the MS category carried forward from the 47th meeting were reviewed again. The

decision was made as follows:

- “SAMURAI Commissioning”, MS11-10 (Yoneda), 6.5 days requested
The decision was “deferred”. The MS proposal should be re-submitted. The decision was entrusted to the MT Committee chair.
- “SHARAQ Commissioning”, MS11-11 (Michimasa), 2 days requested
With the spokesperson turning down 1 day still being deliberated, a BT of 1 day was approved.

4. Handling of the BT for BigRIPS tuning in NP-PAC discussions and BT operations (Ueno)

- A tuning time for users’ own equipment and/or detectors using a beam ($\equiv T_{U-Tu}$) should be indicated in the column “Tuning with beam” in the NP-PAC application form. It was pointed out at the 47th meeting, however, that in some cases “tuning time with BigRIPS for RI beam production ($\equiv T_{BigRIPS}$)” was cited in this column, and approved as requested. In response to this suggestion, the form will be modified to make this point clear beginning from the 11th NP-PAC meeting. In addition, it was also discussed whether the present management of $T_{BigRIPS}$, given in the following, should be changed or not. The discussion will ensue.

An extra BT of 0.5 days is commonly added as a $T_{BigRIPS}$ time, because i) it is not easy to evaluate a $T_{BigRIPS}$ part separately from an approved BT if it was partially approved, although in principle, the additional $T_{BigRIPS} = 0.5$ days is not necessary for the BTs approved including $T_{BigRIPS}$, and ii) even if $T_{BigRIPS}$ is included, BigRIPS tuning could not be conducted within a BT if only a short BT was partially approved. When the actual $T_{BigRIPS}$ exceeds 0.5 days, BigRIPS tuning will be conducted using their own BTs.

- The following comments were submitted from RIBF-UEC on this issue (Suda):
 - If $T_{BigRIPS}$ is commonly fixed to 0.5 days for all the approved experiments, some of the experiments would be required to have their own BT used. To avoid such a disadvantage to users, RNC should check all approved experiments for whether $T_{BigRIPS}$ is included or not. Then, appropriate $T_{BigRIPS}$ should be re-allocated on a case-by-case basis so that BigRIPS tuning can be fully conducted without using a BT for users’ own measurements: $T_{User} = T_{U-Tu} + T_{U-Data}$, where T_{U-Data} is a time for data run.
 - Experimental proposals which require changes of BigRIPS setting many times e.g., to use a large variety of RI beams, should be reviewed by the PAC taking into account a total BT length including $T_{BigRIPS}$ to check for its feasibility. The $T_{BigRIPS}$ time, however, should not be included in an approved BT. It should be provided as an extra BT from the facility. In order to allow applicants to estimate an appropriate $T_{BigRIPS}$, a guideline should be defined and set clearly.
- Taking this opinion into consideration as much as possible, the following management of $T_{BigRIPS}$ starting from the 11th NP-PAC and the BT scheduling of FY2012 second half has been approved:
 - In the proposal review process (NP-PAC)
 1. Applicants indicate only T_{User} ($=T_{U-Tu} + T_{U-Data}$) in their proposals.

2. A time of T_{BigRIPS} is evaluated by the in-house technical review based on the submitted proposal.
3. The PAC reviews proposals in terms of the total time length $T_{\text{BigRIPS}} + T_{\text{U-Tu}} + T_{\text{U-Data}}$. Thus, the proposal can be approved by this total time length at the maximum.

When a BT is conducted

4. Although the BT number of $T_{\text{BigRIPS}} + T_{\text{U-Tu}} + T_{\text{U-Data}}$ can be approved at the maximum, T_{BigRIPS} is managed not by the users but by the BigRIPS Team. Experimenters can not convert T_{BigRIPS} into T_{User} ($T_{\text{U-Tu}}$ and $T_{\text{U-Data}}$ can be re-arranged by experimenters).
 - If various BigRIPS tuning are planned in one BT, the tuning will be carried out all together by the block or step-by-step. Experimenters can determine the tuning plan by consulting with the BigRIPS Team.
 - If the actual T_{BigRIPS} takes longer than the scheduled T_{BigRIPS} time, the BT schedule will be extended so as to conserve T_{User} . If such extension is difficult due to a tight BT schedule, a T_{User} time spent in the BT will be cut short.
5. $T_{\text{BigRIPS}} + T_{\text{U-Tu}} + T_{\text{U-Data}}$ is interpreted as the BT provided to users.
6. For the experiments which have already been approved, the uniform extra BT of 0.5 days is added as T_{BigRIPS} according to the current policy. If T_{BigRIPS} longer than 0.5 days is needed, experimenters should use BT from T_{User} . If users consider that $T_{\text{BigRIPS}} = 0.5$ days is not enough, additional T_{BigRIPS} time can be requested when a call-for-BT-scheduling-requests begins. Then, the allocation of the additional T_{BigRIPS} will be decided by the in-house technical review.

5. Disclosure of the subject titles of NP-PAC proposals (Ueno)

- The presentations by representatives are open to public in the NP-PAC meetings. Their research titles are, however, will be disclosed only if they have been approved. In addition, it is possible not to disclose the title if requested not to. The review of this disclosure policy was discussed at the 49th meeting. This issue has been carried over from the previous meeting.
- After discussions, it was approved to disclose the research titles when proposals are submitted. The disclosure of research titles will be explicitly notified in the call-for-proposals from the next NP-PAC meeting. Research titles will be disclosed on the web and other documents before the NP-PAC meeting. RIBF-UEC also agrees to this policy.

6. FY2012 BT operation basic policy (Sakai)

- With the launch of the EURICA (Euroball RIKEN Cluster Array) project in April, 2012, international use of RIBF will increase in FY2012. The BT shifts due to possible troubles of accelerators and experimental key devices may lead to confusion in making travel arrangements to Japan. Taking this situation into account, the following basic BT operation policy was shown. BTs will be scheduled without allowing for spare days as much as possible.
In case of a trouble, the relevant BT will not be extended but rather canceled or reduced in order to avoid shifting the entire schedule.
- The beam elements for the BT schedule of the FY2012 second half year were suggested. (Sakurai)

7. Next meetings

- The next MT Committee meeting will be held on Thursday, February 16, 2012, at 13:30.
- The next meeting after the next will be held on Friday, March 16, 2012, at 13:30
- Regularly, the meetings in the next fiscal year, starting from April, will be held on the third Friday, at 13:30.