

Minutes of the 43rd Machine-Time Committee Meeting

Date and time: April 15, 2011; 13:30–14:50

Place: RIBF Bldg., Room 203

Attendees: Sakai^a (Chair), Abe^a, En'yo^{a,†}, Fukunishi^a, Haba^{a,†}, Kamigaito^a, Kase^a, Kubo^a, Kubono^b, Morita^a,
Motobayashi^{a,†}, Sakurai^a, Shimoura^b, Teranishi^{c,†,‡}, Ueno^a, Uesaka^a, Uwamino^a, Wakasugi^a

Absent: Yoshida^{a,†}

^aRNC / ^bCNS / ^cRIBF-UEC / [†]Observer / [‡]TV attendee
(in no particular order)

Reports

1. New MT Committee members FY2011 (Sakai)

- Uesaka, Chief Scientist of the Spin-isospin Laboratory, has taken office as a Committee Member.
Haba, Team Leader of the RI Application Team, has become a Committee Observer.

2. Beam-time schedule changes (Ueno)

The beam-time (BT) schedule for April-May was changed as follows.

BTs based on the new RIBF accelerators (RILAC2 / fRC / IRC / SRC)

- After the cancelation of the BTs in April reported at the previous MT Committee meeting, all of the following BigRIPS-related BTs in May utilizing a ¹²⁴Xe beam were canceled.
 - MS11 -03 (Kubo, May/15/21:00 - May/27/21:00)
 - NP0702-RIBF09-1 (Lewitowicz, May/27/21:00 - May/28/21:00)
 - NP0811-RIBF7002 (Doonenbal, May/29/ 9:00 - May/30/ 9:00)

BTs based on the former RARF accelerators (RILAC / AVF / RRC)

In compliance with the decision made in the previous MT Committee meeting, the BT schedule for April has been changed as follows.

- The SHE BT started on April 2, ahead of the original schedule.
 - NP0702-LINAC12-12 (Morita, GARIS, Apr/5/21:00 - Jun/21/9:00)
- The following BT was canceled.
 - NP0702-RRC01-27 (Wada, ²²Ne@RIPS, Apr/16/21:00 - Apr/18/ 9:00)
- The following BTs were shifted to April 16-17.
 - IB0702-RRC01-41 (Abe, ¹²C@E5B, Apr/19/ 9:00 - Apr/19/15:00)
 - ML0901-RRC20-10 (Izumi, ¹²C@E5B, Apr/19/15:00 - Apr/19/21:00)
 - IB0702-RRC01-40 (Abe, ²⁰Ne@E5B, Apr/21/ 9:00 - Apr/21/17:00)

3. Status of RIBF operation

- SHE experiment (Morita)
 - During the second week of April, the beam current of ⁷⁰Zn was increased to $I = 0.6 \mu\text{A}$, the same as that delivered before the earthquake disaster.
 - The total beam dose has reached 10^{20} .
- Accelerator operation / repair (Kamigaito)

- The first beam delivery from RILAC (^{70}Zn) after the earthquake disaster was satisfactory. The repair of damaged parts of the accelerators is in progress.
- The Accelerator Group is now preparing AVF-RRC acceleration for the biological irradiation BTs. A test of AVF single operation was satisfactory. There are still problems with the beam delivery system in Hall D, but the beam transport line to the irradiation area in Hall E5 is fine.

4. Status of the PAC meetings (Ueno)

- 9th NP-PAC: The call-for-proposals will be announced as usual, although the schedule was delayed while plans for BT changes until October were discussed. In the call-for-proposals, the SAMURAI spectrometer will be newly added as RIBF experimental equipment and the description of CRIB will be removed.

Topics discussed

1. Approval of the minutes of the 42nd meeting (Sakai)

2. FY2011 first half-year BT schedule changes (Sakai)

- The current electric power of the Wako campus is being managed by the Committee for power saving measures at Wako campus (hereafter WPS Committee), which was established under the RIKEN Emergency Headquarters. The plan for the power use of RIKEN Nishina Center (RNC) has been discussed with the Facilities and Utilities Division and the WPS Committee through the Accelerator-based Research Promotion Section. The following power-use plan was approved by the WPS Committee for the first half of FY2011.
 - In April, only BTs whose power can be supplied by the CGS system will be scheduled.
 - In May, the cyclotron cascade-acceleration will be started step-by-step for performance tests of the overall accelerator facility under optimized combinations of cyclotrons to achieve the minimum power consumption, using an additional 5 MW supplied by Tokyo Electric Power Company. These tests going beyond the power-supply capacity of CGS will be terminated by the middle of June.
 - The accelerators will be shut down for three months from the beginning of July to the end of September. During this period, RNC will supply a portion of the power generated with CGS, for a maximum of 3 MW, to the Wako campus.
- In accordance with the above policy, the MT Committee determined to schedule the following BTs in the first half year of FY2011.

BTs based on the new RIBF accelerators (RILAC2 / fRC / IRC / SRC)

- Accelerator performance tests down to IRC were scheduled from the beginning to middle of May (RILAC2 + RRC + fRC + IRC).
- An official facility inspection of RILAC2, which has been suspended after the earthquake disaster, was scheduled in the middle of May.
- Accelerator performance tests down to SRC were scheduled in the end of May. The BT of NP0912-RIBF34-02 (Sekiguchi) will also be conducted if possible. (AVF + RRC+ SRC)

- Performance tests of BigRIPS, ZD, and SHARAQ were scheduled in the middle of June. The BT of NP1012-SHARAQ05-01 (Yako) will be also conducted if possible (AVF + RRC + SRC + BigRIPS/ZD + SHARAQ)

BTs based on the former RARF accelerators (RILAC / AVF / RRC)

- The RILAC-GARIS BT was scheduled from April 2 to July 1 (as reported above)
- The biological irradiation BTs were scheduled on April 16 (as reported above). They were also scheduled for the middle of June.
- An RI production BT, in the scheme of AVF single operation, was scheduled for the end of April.
- A CRIB experiment was scheduled for the second half of June, with one part scheduled for two days in May.
- All the other BTs associated with the former RARF that was originally scheduled until the end of September were canceled.

3. FY2011 second half-year BT schedule (Sakai)

- The BT schedule for the second half-year of FY2011 was discussed, with a comparison made of a long-range RIBF operation plan with the plan under consideration by the WPS Committee.

4. Next meeting

- The next MT Committee meeting will be held on Friday, May 20, 2011, at 13:30.
- The meeting after the next will be changed to June 10, 2011, at 13:30.