

Minutes of PPAC on March 11th, 1998.

Draft

Place: RCNP, Osaka University, Meeting room

Date: March 11th, 1998, 10:00–16:30

Attendance: H. Shimizu (Yamagata), K. Hosono (HIT), T. Murakami (Kyoto U.) M. Kamimura (Kyushu U.), Y. Shimizu (Kyushu U.), S. Tasaka (Gifu U.), S. Shibata (Kyoto U.), Y. Masuda (KEK), F. Klein (RCNP, TJL), J. Hosaka (Numazu), M. Oka (TIT), H. Toki (RCNP), T. Nakano (RCNP), V. Goghia (COE, RCNP), S. Nomachi (RCNP), M. Yosoi (Kyoto U.), T. Suzuki (Tokyo-MU), Y. Nagame (JAERI), T. Kishimoto (Osaka)*, H. Ejiri (RCNP)*, K. Hatanaka (RCNP)*, and K. Sato (RCNP)*

*PPAC requested

Absentee: K. Asahi (TIT), I. Endo (Hiroshima U.), K. Hicks (Ohio U.)

0) Introduction of New committee members

1) Election of the PPAC chairperson

H. Shimizu(Yamagata U.) was elected as the PPAC chairperson by mutual vote from among new PPAC members. T. Murakami(Kyoto U.) and T. Nakano(RCNP) volunteered to be the secretaries of the committee, and they were approved.

2) Selection of the BPAC members

Five BPAC members from PPAC were selected: They are K. Asahi(TIT), H. Toki(RCNP), Y. Shimizu(Kyusyu Univ.) K. Hosono (HIT), and M. Nomachi(RCNP).

[A] REPORTS

1. General report by Director H. Ejiri

- Last year RCNP published about 80 papers in several journals and about 60 papers in conference proceedings.
- A number of foreign visitors and graduate students increased significantly.
- RCNP is open not only to domestic users but also to international users.
- Announced that MESON have got a new member from Hungary; Research Institute for Particle and Nuclear Physics (hungarian abbreviation is RMKI) of the Central Research Institute for Physics (hungarian abbreviation is KFKI), so shortly it is RMKI, KFKI, Hungary.
- Summarized Report of the RCNP review: The review committee gave high evaluation to Laser-Electron Photon project at SPring-8 and recommended that it should be funded.

2. Reports from each group in RCNP

Nuclear Science 1a by K. Hatanaka

- Experimental activities in the last year were presented.
- A Focal Plane Polarimeter for the Grand Raiden is now completed and one for the LAS is near to its completion.
- A Cylindrical Drift Chamber for the study of π production mechanism is under construction.
- Development of polarized ^3He source is in progress.
- Next fiscal year CDC construction will continue, while WN course will be improved to obtain a high resolution and low background beam. The Faraday cup for WN course should be improved also. ES course construction will be continued.

Nuclear Science 1b by T. Nakano

- A construction schedule was presented. Beamline and a laser hutch construction will start in this July and be completed by the end of August.
- R&D of a tagging system and a laser system are in progress. Both systems will be installed by the end of August.
- They expect the first laser-electron photon in this fall.
- Monte Carlo simulation study for detector design is in progress.
- “Physics Handbook” for SP8LEP will be edited in a year.

Nuclear Science 1c by H. Ejiri

- Some scientific programs at Oto Cosmo observatory were presented, namely extensive measurements on double β -decays, a study on a ν -oscillation, and

a search for dark matters.

- ELEGANT-VI has been installed at Oto.
- Nuclear spin-isospin responses relevant to double β -decays have extensively investigated by using charge-exchange nuclear reactions like a ($^3\text{He},t$) reaction at the RCNP ring-cyclotron.

Nuclear Science 2 by H. Toki

- The theory group has 12 students and many COE visiting researchers.
- A list of current activities was presented.
- The group will host two international conferences; SNOW98 and RCNP-APCTP School on Quark-Hadron Physics.
- Owing to the super computer large numbers of subjects can be covered at RCNP.

Accelerator Information 1 by K. Sato.

- The number of SAS supporting staff will be reduced from 10 to 9 because of a tight budget.
- Stable 1 week- $0.5 \mu\text{A}$ operation for proton beams at 300 MeV was achieved by controlling cooling water temperature.
- The energy resolution of proton beams has been improved: It is typically 120 keV, and the best value achieved is 80 keV at $T_p = 300\text{MeV}$.
- The group will promote collaboration with industries.

Accelerator Information 2 by M. Nomachi

- Tuning parameters of Unix computing system will be optimized and hopefully finalized by the beginning of April.
- The VMS system will terminate its operation by the end of March, '98.
- The group will distribute 20 NT terminals in April. They should be maintained by end users.
- DAQ collaborations with ATLAS, PHENIX, and COMPASS were reported.
- Development of Configurable logic unit for data collection is in progress.

[B] DISCUSSION

1998 Funding status by H. Ejiri

- Budget will be reduced 15 % in 1998. Therefore we might have to shorten the time period of accelerator operation additionally about 2 months. It will result in 8-month-long beamtime in this fiscal year.

- Some suggestions from the PPAC members: 1) Try to be flexible about the beam time. 2) Do not strictly cut out the operation time period. 3) Re-evaluate all approved experimental proposals and then put priorities on them. 4) Try to find new money sources for a new project. 5) RCNP should announce that the budget is extremely limited to construct new detector systems. (BPAC should call only proposals using existing detector systems.)
- After a discussion we recommend that at first BPAC should re-evaluate all approved experiments using the ring cyclotron and put priority upon them. Then we would compare all planned projects in all divisions of nuclear physics at RCNP to evaluate the priorities among them in order to allocate the available budget.

Status of project

WS course by K. Hatanaka

- Minimum cost will be 200 million yen and the installation takes half a year.
- ⇒ BPAC should seek some projects using a WS course after the modification. The project must be justified by its physics significance.

ES course by T. Kishimoto

$pn \rightarrow p\Lambda$ reaction. Some background estimation has been made. CDC is under construction. Total cost may be 117 million yen.

- ⇒ Some member of PPAC appreciates the significance of the project while some feels uneasy about the project mainly because of the experimental feasibility and the total budget requested. BPAC should seriously evaluate the proposal on these aspects, and give the feedback to the experimental group.

Selection new QPAC members

H. Lee (Argonne), H. Toki (RCNP), I. Endo (Hiroshima U.), Y. Masuda (KEK), T. Hatsuda (Tsukuba*), and M. Nomachi (RCNP).

(* now Kyoto Univ.)

RCNP workshop

Following 5 workshops were proposed.

1. RCNP international workshop on Neutrinos and Nuclear Rare Processes in Astroparticle by Takahisa—0.6 million yen

2. IV accelerator power supply workshop by Sato—0.5 million yen
3. RCNP workshop on Spin physics by Hatanaka—0.65 million yen
4. RCNP-APCTP Joint International School on Physics of Hadrons and QCD by Oka —0.3 million yen
5. RCNP international workshop on nuclear responses and medium effect by Noro —0.6 million yen

After a short discussion all of them are approved.