



July 13, 2009

Dear Dr. Toshio Kobayashi,

The 5th Meeting of Program Advisory Committee for nuclear physics experiments at RI Beam Factory (NP-PAC) was held on June 18-19, 2009, where the committee reviewed proposals and made recommendation for beam-time allocation. As directors of the RIKEN Nishina Center for Accelerator-Based Science and Center for Nuclear Study, University of Tokyo, we have decided to follow the recommendation, which is attached below.

You will be contacted by us regarding the beam time allocation in due course.

Sincerely Yours,

9. Jano

Yasushige Yano Director of RIKEN Nishina Center for Accelerator-Based Science

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Takaharu Otsuka Director of Center for Nuclear Study, The University of Tokyo

## NP0906- RIBF16

Spokesperson : Toshio Kobayashi Neutron density distributions of He & Li isotopes using (p,pn) neutron-knockout reactions

Approved for 2 days of beam time.

This experiment aims at observing the density distribution of neutrons using the (p,pn) neutron-knockout reactions. The PAC evaluated the scientific merits and feasibility of the experiment. The physics motivation is well justified and the PAC agrees on the importance of the experiment which complements that of the (p,2p) reactions by the same group which is already approved and scheduled to run soon. The experiment is well designed and a detailed analysis of the experimental condition is presented. The PAC sees no obvious difficulties. However, given the limited available beam time, the PAC recommends 2 days which should be scheduled together with the (p,2p) reactions. This would allow more efficient use of the limited beam time. The PAC also recommends that the beam time for the (p,pn) reactions be used for the study of the He isotopes.