

E419

TITLE:**Performance test of an active target with micro pixel chamber****SPOKESPERSON:** Tatsuya Furuno**SUMMARY OF THE PROPOSAL**

Study on alpha clustering phenomena is important for the deeper understanding of nuclear structure and nucleosynthesis. With the recent development of new accelerators, nuclear physics is moving its interests to unstable nuclei. Theoretical calculation predicts interesting phenomena of alpha clustering in neutron-rich Be isotopes. To examine these phenomena, inverse kinematics experiments with RI beam must be performed. However, there is a big challenge in the kinematics stem from low-momentum transfer reactions.

Active target is a promising solution to the problem because it can detect recoil particles with small energy. An active target based on μ -PIC TPC is developed at RCNP. We have already performed source test of the active target and confirmed high position resolution. In this paper, we propose a test experiment using accelerated beam under the similar condition of the RI beam experiments.