

Abstract Submitted
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Study of neutron rich nuclei by CYRIC new cyclotron TSUTOMU SHINOZUKA, MASAHIRO FUJITA, AKIYOSHI YAMAZAKI, MIFUYU UKAI, TOMOKAZU SUZUKI, YUJI MIYASHITA, NOZOMI SATO, MITSUHARU OHGUMA, Cyclotron and Radioisotope Center, Tohoku University, Sendai, HIROKAZU TAMURA, TAKESHI KOIKE, YUSUKE MIURA, SARI KINOSHITA, YUE MA, KOTARO SHIROTORI, Department of Physics, Tohoku University, Sendai — The AVF cyclotron at CYRIC has been replaced from K=50 MeV AVF cyclotron to K=130 MeV AVF cyclotron, which accelerates heavy ions up to Ar with ECR ion source and high intensity protons with negative Hydrogen ion source. All of the missions for replacement is almost completed. The several experiments for nuclear spectroscopy of unstable nuclei with the new cyclotron has been planned and partly advanced.

- Development of RF Ion Guide Isotope Separator toward to ^{78}Ni
- Moment measurements with 6 clover detectors by $\gamma-\gamma$ angular correlation for low excited states of neutron rich nuclei.
- In-beam gamma ray measurements with 6 clovers and 14 single Ge detectors (Hyperball 2)

The details of developments and several experimental results will be presented.

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