Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

GRETINA lifetime measurements: magnetic transition rates and halo structure HIRO IWASAKI, National Superconducting Cyclotron Laboratory, Michigan State University — Halo nuclei have served as benchmark systems for understanding nuclear structure and correlations at the limit of stability. Valence neutrons with spatially extended wave functions are expected to provide a new degree-of-freedom in collective modes, inducing so-called soft collective motions. However, the experimental information on halo excitation modes has been limited so far to the E1 mode, hampering the detailed characterization. In GRETINA campaign at NSCL, we performed excited-state lifetime measurements to investigate magnetic transition rates of halo nuclei. In this talk, after introducing our program, the GRETINA performance in lifetime measurements as well as our results on the neutron-rich 17C isotope will be discussed.

Hiro Iwasaki
National Superconducting Cyclotron Laboratory, Michigan State University

Date submitted: 27 Jun 2014 Electronic form version 1.4