

Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Measurement of $^{17}\text{F}+\text{p}$ reactions with ANASEN¹ LAURA LINHARDT, MILAN MATOS, B.C. RASCO, HANNAH GARDINER, KEVIN MACON, JEFFREY BLACKMON, Louisiana State University, DANIEL SANTIAGO-GONZALEZ, LAGY BABY, EVGENIY KOSCHIY, INGO WIEDENHOEVER, GRIGORY ROGACHEV, Florida State University, ANASEN COLLABORATION — The Array for Nuclear Astrophysics Studies with Exotic Nuclei (ANASEN) is a charged-particle detector array designed primarily for studies of reactions important in the p- and rp- processes with proton-rich exotic nuclei. The first in-beam measurements with a partial implementation of ANASEN have been performed at the RESOLUT radioactive beam facility of FSU. This includes stable beam experiments and measurements of the $^{17}\text{F}(\text{p},\text{p})^{17}\text{F}$ and the $^{17}\text{F}(\text{p},\alpha)^{14}\text{O}$ reactions that are important for understanding the structure of ^{18}Ne and the $^{14}\text{O}(\alpha,\text{p})^{17}\text{F}$ reaction rate. The performance of ANASEN and initial results from the ^{17}F studies will be presented.

¹This work is supported by the USDOE and NSF.

Laura Linhardt
Louisiana State University

Date submitted: 01 Jul 2011

Electronic form version 1.4