Abstract Submitted
for the APR17 Meeting of
The American Physical Society

Low momentum recoil detectors in CLAS12 at Jefferson Lab
GABRIEL CHARLES, Old Dominion University, CLAS COLLABORATION COLLABORATION — Part of the experimental program in Hall B of the Jefferson Lab is dedicated to studying nucleon structure using DIS on nuclei and detecting low-momentum recoil particles in coincidence with the scattered electron. For this purpose, specially designed central detectors are required in place of the inner tracker of CLAS12 to detect particles with momenta below 100 MeV/c. We will present the status of the BONuS12 RTPC detector that will take data within the next 2 years. We will detail the main improvements made from the previous BONuS RTPC. In a second part, we will discuss another recoil experiment, called ALERT, that has been proposed to run in Hall B. The constraints being different, the recoil detector is based on a drift chamber and an array of scintillators. We will present the main differences between the two detectors and summarize the RD performed to develop the ALERT detector.

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Date submitted: 30 Sep 2016 Electronic form version 1.4