Abstract Submitted for the DNP19 Meeting of The American Physical Society

Engineering the resistive bases of the electromagnetic calorimeter in hall a at Jefferson Lab JORGE PENA, Student Researcher, GABRIEL NICULESCU, IOANA NICULESCU, Research Professor, JEFFERSON LAB SUPER BIGBITE SPECTROMETER COLLABORATION, JEFFERSON LAB HALL A COLLABORATION — The Super Bigbite Spectrometer (SBS) to be used in Hall A at Jefferson National Accelerator Lab to carry out a number of seminal experiments, such as the measurements of the electric and magnetic form factors of the proton and neutron. The JMU Particle and Nuclear Physics group is working on preparation of the 1700+ channel electromagnetic calorimeter, including construction of the new voltage dividers that will be used to power and extract the signal from the Photomultiplier Tubes (PMTs). In the talk the design of new resistive base and the layout of its electronic circuit will be presented. The challenges and solutions of the design work and electrical measurements of the existing resistive bases will be shown.

Jorge Pena James Madison University

Date submitted: 02 Jul 2019 Electronic form version 1.4