

Abstract Submitted
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Fusion measurements of exotic beams with "Encore", the new Active Target Detector at FSU BENJAMIN ASHER, SERGIO ALMARAZ-CALDERON, JESUS PERELLO, LAGY BABY, Florida State University — Exotic nuclei and beams are on the forefront of nuclear science and with them, new detector systems to exploit these beams to their greatest extent. These radioactive beams allow the measurement of new exotic fusion systems which, will in turn help understand fusion processes near the coulomb barrier as well as energy production within stars. At Florida State University (FSU) we have developed 'Encore', a Multi Sampling Ionization Chamber which works as an active target detector consisting of a segmented anode to measure energy losses of the beams and the subsequent reactions as the beam passes through the detector. preliminary Results on the characterization of the detector, future improvements and first measurements of the $^{17}\text{F} + ^{12}\text{C}$ system performed at FSU using a radioactive ^{17}F beam will be presented This work was supported by the State of Florida and the NSF under grant PHY-1712953

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