Abstract Submitted
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SAMURAI Time-Projection Chamber: A device for constraining the symmetry energy[1] R. SHANE, K. ANDREWS, J. BARNEY, B. BROPHY, Z. CHAJECKI, C.F. CHAN, J.W. DUNN, E. ERSOY, J. ESTEE, J. GILBERT, F. LU, W.G. LYNCH, M.B. TSANG, NSCL, Michigan State University, A.B. MCINTOSH, S.J. YENNELLO, Texas A&M University Cyclotron Institute, S. DYE, M. EL-HOUSSIENY, M. FAMIANO, C. SNOW, Western Michigan University, T. ISOBE, H. SAKURAI, A. TAKETANI, RIKEN, Japan, T. MURAKAMI, Kyoto University, W. POWELL, University of Liverpool, SAMURAI-TPC COLLABORATION — The SAMURAI-TPC is a time-projection chamber to be used in conjunction with the SAMURAI spectrometer at the Radioactive Isotope Beam Facility at RIKEN, Japan. It is designed to detect charged pions as well as light charged particles up to oxygen produced in heavy ion collisions. Design of the TPC is based on the EOS TPC with similar dimensions. However, the TPC will be equipped with the newly designed General Electronics for TPCs (GET). One of the proposed experimental programs using the TPC is to measure pi+/pi- ratios from heavy-ion collisions which should provide constraints on the asymmetry term in the nuclear equation of state at densities about twice saturation density. In this talk, the design and construction of the detector will be discussed.

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