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SAMURAI-TPC: Field Cage Design and Prototyping¹ F. LU, J. BARNEY, Z. CHAJECKI, C.F. CHAN, J.W. DUNN, J. ESTEE, J. GILBERT, W.G. LYNCH, R. SHANE, M.B. TSANG, NSCL, Michigan State University, A.B. MCINTOSH, S.J. YENELLO, Texas A&M University Cyclotron Institute, M. FAMIANO, Western Michigan University, T. ISOBE, H. SAKURAI, A. TAKE-TANI, RIKEN, Japan, T. MURAKAMI, Kyoto University, SAMURAI-TPC COL-LABORATION — The SAMURAI-TPC is a time-projection chamber to be used in conjunction with the SAMURAI spectrometer being built at the Radioactive Isotope Beam Facility at RIKEN, Japan. It will be used to measure charged pions, protons and light ions. The pi+/pi- ratios from heavy-ion collisions 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 operation of the field cage, an essential part of the detector, will be discussed, along with the results of prototype testing.

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