

Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Pad Plane Design and Readout for SAMURAI TPC¹ J. BARNEY, Z. CHAJECKI, C.F. CHAN, J.W. DUNN, J. ESTEE, J. GILBERT, F. LU, W.G. LYNCH, R. SHANE, M.B. TSANG, Michigan State University, A.B. MCINTOSH, S.J. YENELLO, Texas A&M University, M. FAMIANO, Western Michigan University, T. ISOBE, H. SAKURAI, A. TAKETANI, RIKEN, Japan, T. MURAKAMI, Kyoto University, SAMURAI-TPC COLLABORATION — The SAMURAI TPC is being built at Michigan State University to be used in the SAMURAI spectrometer at RIKEN in Japan, as part of the Symmetry Energy project, which focuses on obtaining constraints on the symmetry energy at supra-saturation densities. The presentation will discuss the development of the TPC as well as design for readout plane design for the TPC. These involve enabling the use of existing and future front end electronics (FEE), making the most of limited space, designing a circuit board for the pad plane, and techniques to glue the pad plane. The pad plane has been designed to work with either STAR or AGET electronics. The pad plane is made of a circuit board designed to minimize crosstalk and capacitance. The board must be built in smaller pieces and tiled, using alignment pins and precision gluing. Prototypes for the pad plane to FEE connection, pad plane gluing and STAR card mounting will be presented.

¹Supported by the Department of Energy under Grant DE-SC0004835.

J. Barney
Michigan State University

Date submitted: 03 Aug 2011

Electronic form version 1.4