Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Sarcophagus of the CMS Zero Degree Calorimeters[1] KYLE AXTON, MICHAEL MURRAY, University of Kansas — The Zero Degree Calorimeters of the CMS experiment at the Large Hadron Collidor will become significantly radioactive after the first few proton-proton runs. The detectors sit within large copper blocks, called TANS, that also include the two beam pipes. The calorimeters must be removed during bake out of the beam pipes. To minimize the radiation received by the personal a remotely controlled crane will place the calorimeters into a sarcophagus that will shield workers from the induced radioactivity. Both the mass and size of the sarcophagus are limited by constraints of the LHC tunnel. We will describe the design, construction and use of the sarcophagus.

[1]University of Kansas Honors Program and the National Science Foundation Award Number: 0449913.

Kyle Axton
University of Kansas

Date submitted: 12 Aug 2009 Electronic form version 1.4