

Abstract Submitted  
for the TSF13 Meeting of  
The American Physical Society

**Hardware Engineering Design for 3D Magnetic Field Mapping**

ERIN FERRELL, University of Texas at Brownsville — Creating the design and operation aspects for an apparatus that will create a three dimensional map of the magnetic field surrounding the apparatus. The apparatus will include a Nintendo Wii console remote coupled to a magnetometer, an infrared beacon will also be made to calibrate the Wii console remote. Using the pinhole camera method to transform the data being viewed by the Wii console remote from a two dimensional into a three dimensional perspective. The final prototype should be able to function with high resolution and an accuracy to track small electrical anomalies.

Erin Ferrell  
University of Texas at Brownsville

Date submitted: 20 Sep 2013

Electronic form version 1.4