1017-46-225 **Patrick Arthur Brown*** (patdumpsite_school@hotmail.com). Uniqueness Theorems for Inner Functions and Fixed Sets of Positive Measure.

This research comes from seeking out boundary conditions that allow two inner functions to generate a dense subalgebra of The Hardy Spaces. We will discuss sufficient conditions under which two inner functions are equal up to an automorphism under certain assumptions of the behavior on the boundary. We then look to inner functions which fix sets of positive measure and bring the two ideas together. (Received February 23, 2006)