

In this work, we study Lebesgue theorem analogy in the space 2^k with Haar measure and a related theorem about k -linkedness of the measure algebra of this space. The whole text is divided in three chapters. In the first chapter we explain some important definitions and basic properties of the measure space. The Lebesgue theorem is studied in the second chapter. After the essential definition of the point of density, the major part of the chapter is dedicated to the proof of the theorem. The theorem states, that the symmetric difference between any measurable set and the set of its points of density has measure zero. In the third chapter we study the k -linkedness theorem; a theorem which states that the measure algebra of the space 2^k is k -linked, if $k \leq \aleph_1$.