

FUZZY SET AND FUZZY RELATIONS

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In this dissertation fuzzy sets and their properties are discussed. The three decomposition theorems are analyzed. Several nice theorems related with fuzzy sets and relations are studied. Discussions on strong fuzzy homomorphisms and ordinary homomorphisms are carried out.

This dissertation has three chapters. First chapter is introductory in nature defining fuzzy sets and some of their basic properties. In chapter two the proofs of the three decompositions are given. In chapter three the concept of fuzzy relations is introduced and several illustrative examples are given. Further the notion of fuzzy homomorphisms and strong fuzzy homomorphisms are described.