DE LA SALLE UNIVERSITY

ON OPEN MAPS AND SPAN ZERO

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ABSTRACT

The span of a metric space is a measure of "connectedness" of the metric space. Defined by Duda and Lelek , this concept was studied intensively, by Mc Lean, Kawamura, Oversteegen and others.

This paper presents some results by the above-named authors. The main result presented is the theorem which states that if a compactum has span zero then its image under an open continuous map has span zero also.

Among the concepts studied in this paper are the confluent maps between metric spaces and tree-like curves. Related to these are the approximately right invertible mappings and ε_n-translations. All these concepts and their relations to spans of metric spaces are discussed in this paper.

TABLE OF CONTENTS