



**INTERSECTION EXISTENT AND LEAST AND STRONGEST
PROPERTIES FOR TOPOLOGICAL PROPERTIES,
PRODUCT PROPERTIES, SUBSPACE PROPERTIES,
AND PROPERTIES THAT ARE WEAKLY P_0**

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Received March 13, 2017

Abstract

Within this paper, necessary and sufficient conditions for the intersection of any two topological properties to exist in a collection of topological properties closed under unions are given, questions concerning a least and strongest property in the collections of topological properties, product properties, subspace properties, and properties that are weakly P_0 are resolved, and the collection of properties that are weakly P_0 are shown to not be closed under either unions and intersections and to have neither a least or a strongest element.

Keywords and phrases: topological properties, intersection existence, product properties, sub-space properties, least property, strongest property.

**Pioneer Journal
of Mathematics
and Mathematical
Sciences**



Pioneer Scientific
Publisher