

Subspace Properties of Lindelöf Topological Groups

By

Abdelrahman Ifraih Aloudat

Supervisor

Dr. Hamza Alzaareer

Abstract

In the context of topological space, the Lindelöf subspace is defined. This thesis introduces the definition of Lindelöf subspace within the topological group, exploring its properties, such as the question, "Is a subspace of the Lindelöf topological group also Lindelöf?" And study some important properties of Lindelöf subspace within the topological group.

Keywords: Topological Group, Lindelöf space, Lindelöf Topological Group, Subspace Properties of Lindelöf Topological Groups.