Sequentially compact and compactly generated topological groups

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Abstract

The concepts of sequentially compact and compactly generated spaces have been recognized as significant tools in general topology. Building upon these fundamental concepts, this thesis proposes the definition of a sequential compact topological group and explores some of its fundamental properties, including a discussion on its relationship with compactly generated topological groups.

Keywords: Topological group, Sequential compactness, Sequentially compact topological group, Compactly generated group.