

1084-46-87

Warren B. Moors* (moors@math.auckland.ac.nz), Warren B. Moors, Department of Mathematics, The University of Auckland, Private Bag 92019, Auckland, 1142, New Zealand.

Pseudo-compact semi-topological groups.

A semitopological group (topological group) is a group endowed with a topology for which multiplication is separately continuous (multiplication is jointly continuous and inversion is continuous). In this paper we give some topological conditions on a semitopological group that imply that it is a topological group. For example, we show that every separable pseudocompact semitopological group is a topological group. We also show that every locally pseudocompact semitopological group whose multiplication is jointly continuous is a topological group. (Received August 23, 2012)