Shlossberg, Menachem
Minimality in topological groups and Heisenberg type groups. (English) Zbl 1208.54014

A Hausdorff topological group $G$ is minimal if $G$ does not admit a strictly coarser Hausdorff group topology. The author studies relatively minimal subgroups in topological groups. In particular, he finds some natural relatively minimal subgroups in unipotent groups that are defined on archimedean absolute valued (not necessarily associative) division rings. For instance, some of the classical rings considered besides the real numbers are the ring of quaternions and the ring of octonions. In this way, the author throws fresh air into the subject and generalizes previous results obtained about generalized Heisenberg groups by D. Dikranjan and M. Megrelishvili in [Topology Appl. 157, No. 1, 62–76 (2010; Zbl 1190.22002)].

Reviewer: Salvador Hernández (Castellon)

MSC:
54H11 Topological groups (topological aspects)
54H13 Topological fields, rings, etc. (topological aspects)

Keywords:
minimal group; Heisenberg type group; octonions; semidirect product

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