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Steven Clontz* (clontsc@auburn.edu), Auburn University, AL. *Characterizing Covering Properties Using Limited Information Strategies for Topological Games.*

Two topological games $LF_{KP}(X)$ and $LF_{KL}(X)$ due to Gary Gruenhage proceed as follows: each round, the first player K chooses a compact set in X , followed by the second player P (resp. L) choosing a point (resp. compact set) in X which misses every compact set chosen by K previously. The game proceeds for ω -many rounds, and K wins the game if the points (resp. compact sets) chosen by her opponent are locally finite in X . For locally compact X , various covering properties are characterized by the presence of winning limited information strategies for player K , strategies which only require partial memory of the history of the opponent's moves. In addition, by investigating these limited information strategies, we obtain a novel proof of the equivalency of various covering properties in locally compact spaces: X is Lindelöf iff X is σ -compact iff X is hemicompact. We will introduce these games and demonstrate the intuition behind these results, which were part of the speaker's early work toward his dissertation. (Received September 14, 2013)