

Games on a base space and on its C_p -space

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The closed discrete game played on a space X , $CD(X)$, is the game played in ω -many innings by Players I and II such that at each inning $n < \omega$, I plays some non-empty open subset U_n of X and II replies with an $x_n \in U_n$. Once all moves have been made, II wins if $\{x_n : n < \omega\}$ is closed and discrete, otherwise I wins. Tkachuk has asked whether there is a Tychonoff space X such that $C_p(X)$ is Fréchet-Urysohn and Player II has a winning strategy on $CD(C_p(X))$. The aim of this talk is to answer this question and explore similar games to $CD(C_p(X))$ and their equivalent games played on the base space X .