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A game and its relation to netweight and D-spaces

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Abstract: We introduce a two player topological game and study the relationship of the existence of winning strategies to base properties and covering properties of the underlying space. The existence of a winning strategy for one of the players is conjectured to be equivalent to the space have countable network weight. In addition, connections to the class of D-spaces and the class of hereditarily Lindelöf spaces are shown.

Keywords: topological game, network, netweight, weakly separated, D-space

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