

# TOPOLOGICAL GAMES OF BOUNDED SELECTIONS

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Given families of sets  $\mathcal{A}$  and  $\mathcal{B}$ , we denote by  $G_1(\mathcal{A}, \mathcal{B})$  the game, played between ALICE and BOB, in which in each inning  $n \in \omega$ :

- ALICE chooses  $A_n \in \mathcal{A}$ ;
- BOB responds with  $b_n \in A_n$ ,

and that BOB wins if  $\{b_n : n \in \omega\} \in \mathcal{B}$ .

Variations of this game, such as  $G_k(\mathcal{A}, \mathcal{B})$  (in which, for a fixed  $k \in \omega$ , BOB is allowed to pick  $k$  elements in every inning), or  $G_{\text{fin}}(\mathcal{A}, \mathcal{B})$  (in which BOB is allowed to pick any finite number of elements in each inning) have been studied and presented some differences from the first game, depending on the families  $\mathcal{A}$  and  $\mathcal{B}$  considered.

We present new intermediate variations of these classical games (mainly, in the covering and tightness cases) and show how they differ from their counterparts, as well as what new properties can be derived from them.

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