Bell, Murray; Ginsburg, John

Compact spaces and spaces of maximal complete subgraphs. (English) Zbl 0554.54009

Trans. Am. Math. Soc. 283, 329-338 (1984).

Let G be a graph and let M(G) denote the collection of all maximal complete subgraphs of G. The set M(G) is topologized by considering it to be a subspace of the power set of G equipped with the usual product topology. The main question is the following: Which compact spaces can be represented as M(G) for some graph G? The answer to this question is: precisely those that have a binary subbase for the closed sets consisting of clopen sets. An example is presented that this class of spaces does not coincide with the class of all zero-dimensional supercompact spaces.

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