The well-known Galvin-Prikry Theorem states that Borel partitions of the Baire space are Ramsey. Thus, given any Borel subset $X$ of the Baire space and a non-empty basic open set $N$, there is a basic open subset of $N$ which is either contained in $X$ or disjoint from $X$. In their 2005 paper, Kechris, Pestov and Todorcevic point out the dearth of similar results for topological spaces in which each point represents a copy of a given homogeneous relational structure. The speaker has attained such a result for Borel colorings of copies of the Rado graph. We build a topological space of copies of the Rado graph, endowed with a metric topology similar to the Baire space. Using techniques developed for our work on the big Ramsey degrees of the Henson graphs, we prove that Borel partitions of this space of Rado graphs are Ramsey. The methods extend to topological spaces of Henson graphs as well. (Received July 11, 2019)