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*A homotopy viewpoint on PCF*

**Abstract:** In the talk we will describe a model category and use it to introduce homology-theoretic intuitions to set theory. Our main observation is that the homotopy invariant version of cardinality is the covering number of Shelah's PCF theory. This suggests a homotopy version of GCH, on which PCF theory sheds some light. We conclude with a small "dictionary" for set theory using this model category, hoping that it will help in finding more meaningful homology-theoretic intuitions in set theory.