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Robert Kropholler, Ian J. Leary and Ignat Soroko* (ignat.soroko@gmail.com). *Groups of type FP and their quasi-isometry classes.*

There are only countably many isomorphism classes of finitely presented groups, i.e. groups of type F_2 . Considering a homological analog of finite presentability, we get the class of groups FP_2 . Ian Leary proved that there are uncountably many isomorphism classes of groups of type FP_2 (and even of finer class FP). Using Bowditch's concept of taut loops in Cayley graphs, we prove that Ian Leary's groups form uncountably many classes even up to quasi-isometry. These groups all have finitely generated relation module and thus give rise to a series of potential counterexamples to the famous Relation Gap Problem. (Received June 23, 2019)