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**Federico Castillo\***, 1460 Jayhawk Blvd, 405 Snow Hall, Lawrence, KS , and **Jose Alejandro Samper**. *Matroids with prescribed topology*.

Associated to a matroid there are at least three simplicial complexes of interest: independence complex, broken circuit complex, and order complex. Bjorner showed that they are all shellable and hence homotopically equivalent to a finite wedge of spheres. We focus on studying the (finite!) set of matroids, up to isomorphism, with a given fixed homotopy type. (Received January 28, 2019)