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**Jozef H. Przytycki\*** (przytyc@gwu.edu), Department of Mathematics, George Washington University, Washington, DC 20 052, and **Marithania Silvero**. *Does extreme Khovanov homology lead to bouquets of spheres?*

It was proven by González-Meneses, Manchón and Silvero that the extreme Khovanov homology of a link diagram is isomorphic to the reduced (co)homology of the independence simplicial complex obtained from a bipartite circle graph constructed from the diagram. In this talk we conjecture that this simplicial complex is always homotopy equivalent to a wedge of spheres. In particular, its homotopy type, if not contractible, would be a link invariant and it would imply that the extreme Khovanov homology of any link diagram does not contain torsion. We prove the conjecture in many special cases and find it convincing to generalize it to every circle graph (intersection graph of chords in a circle). In particular, we prove it for the families of cactus, outerplanar, permutation and non-nested graphs. Conversely, we also give a method for constructing a permutation graph whose independence simplicial complex is homotopy equivalent to any given finite wedge of spheres. We outline also a program how to find a finite geometric realization of the almost extreme Khovanov homology. (Received February 28, 2017)