

Relative flattenability between normed spaces

Speaker: Eleftherios Kastis

Abstract: Flattenability is a graph property that has been studied extensively in the last 20 years, especially for the Euclidean and other l^p -norms. A graph G is d -flattenable in a normed space X , if every realization of G in any higher-dimensional space X^N can be flattened in X^d , meaning that there is a realization of G in X^d with the same edge lengths as the original one. This concept generalizes the notion of isometric embeddings of finite metric spaces into normed spaces. The theory can be extended to general normed spaces X and Y . A graph is called (X,Y) -flattenable if every realization of G in Y can be flattened in X . In this talk, we explore problems on flattenability bounds between normed spaces and graph minor properties. This is joint work with S. Dewar, D. Kitson and W. Sims.