Koko Kayibi: Matroids and simplicial complexes

A matroid can be defined as a simplicial complex endowed with an exchange property. But the structure of a matroid allows many simplicial complexes to be defined and some of counting polynomials related to these simplicial complexes are evaluations of the Tutte polynomial. I will give a short survey of classical results and an expansion of the Tutte polynomial by independent sets and its dual.