FUNDA GULTEPE, University of Luxembourg

A distance formula for the outer automorphism group of the free group.

We will discuss estimating word distance between two geometric outer automorphisms of the free group $Out(F_n)$ using the geometry of the hyperbolic simplicial complexes it acts on. We will present the construction of the obtained distance formula for $Out(F_n)$ through its analogy with the similar formulas for the special linear group and the mapping class group. This is a joint work with Yulan Qing and Kasra Rafi.