

1145-20-2638 **Saikat Das*** (joysaikat@gmail.com), 13 Donald Street, Apt D, Bloomfield, NJ 07003. *Thickness of $Out(A_1 * \dots * A_n)$.*

Behrstock-Druţu-Mosher introduced algebraic thickness of finitely generated groups to decide non-relative hyperbolicity of a large collection of geometrically interesting groups, such as mapping class groups and outer automorphism groups for all but finitely many cases.

In this talk, we will study hyperbolicity, relative hyperbolicity and thickness of $Out(A_1 * \dots * A_n)$, where each A_i is a finite group. The geometric models for these groups will be Guirardel-Levitt deformation spaces, which are generalization of Culler-Vogtmann outer spaces. We will use these geometric models to find a virtual generating set and some suitable undistorted subgroups for our investigation. (Received September 25, 2018)