

Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

12:00 pm, Tuesday, February 7, 2017, 243 Altgeld Hall

Gili Golan (Vanderbilt)

The generation problem in Thompson group F

Abstract: We show that the generation problem in Thompson group F is decidable, i.e., there is an algorithm which decides if a finite set of elements of F generates the whole F . The algorithm makes use of the Stallings 2-core of subgroups of F , which can be defined in an analogue way to the Stallings core of subgroups of a free group. An application of the algorithm shows that F is a cyclic extension of a group K which has a maximal elementary amenable subgroup B . The group B is a copy of a subgroup of F constructed by Brin and Navas.

[Video](#)