

1142-20-188

**Emily Stark\***, emily.stark@technion.ac.il. *Cannon–Thurston maps in non-positive curvature.*

Two far-reaching methods for studying the geometry of a finitely generated group with non-positive curvature are (1) to study the structure of the boundary of the group, and (2) to study the structure of its finitely generated subgroups. Cannon–Thurston boundary maps allow one to combine these approaches. Mitra (Mj) generalized work of Cannon and Thurston to prove the existence of Cannon–Thurston maps for any normal hyperbolic subgroup of a hyperbolic group. I will explain why a similar theorem fails for certain CAT(0) groups and how we use Cannon–Thurston maps to obtain structure on the boundary of certain hyperbolic groups. This is joint work with Algom-Kfir–Hilion and Beeker–Cordes–Gardham–Gupta. (Received September 03, 2018)