THE CARTOON STORY OF WHY THE MAPPING CLASS GROUP IS FINITELY GENERATED BY DEHN TWISTS

JOHANNA MANGAHAS UNIVERSITY OF MICHIGAN

After defining the mapping class group of a closed surface and Dehn twists, we prove the claim for the torus and then outline the induction up to closed surfaces of higher genus. Along the way we highlight use of the group's action on a particular graph: the 1-skeleton of the complex of (nonseparating) curves, which we'll define. This aims to be an easy, entry-level talk with lots of pictures.