A presentation for the mapping class group of a non-orientable surface via the complex of curves.

Błażej Szepietowski
Gdańsk University, Poland

Abstract. We study the action of the mapping class group $\mathcal{M}(F)$ on the complex of curves of a non-orientable surface F. We obtain, by using Brown's theorem, a presentation for $\mathcal{M}(F)$ defined in terms of the mapping class groups of the complementary surfaces of collections of curves, provided that F is not sporadic, i.e. the complex of curves of F is simply connected. We also compute a finite presentation for the mapping class group of each sporadic surface.