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Jean Pierre Mutanguha* (mutanguha@mpim-bonn.mpg.de). *Limit trees for free group automorphisms*. Preliminary report.

The study of outer automorphisms of free groups borrows a lot of tools and ideas from the study of mapping classes of closed orientable surfaces. One tool that's still missing is the canonical decomposition of mapping classes: up to isotopy, an orientation preserving surface homeomorphism preserves a unique minimal multicurve such that the restriction to (orbits of) components of the multicurve's complement is either a pseudo-Anosov or a finite-order homeomorphism. We will translate this canonical decomposition in terms of \mathbb{R} -trees and then provide an analogue for exponentially growing outer automorphisms of free groups. (Received January 13, 2021)