

1163-51-1643

C. Ashley* (caleb.ashley@bc.edu), **N. Cameron**, **E. Goins**, **E. Lawrence**, **T. McKenzie**,
and **K. Pershell**. *Monodromy of Compositions of Belyi Maps*. Preliminary report.

Among all hyperbolic structures on a Riemann surface S_g of fixed genus $g \geq 2$, those that are also arithmetic are special. Grothendieck's famous CNRS research proposal, "Esquisse d'un Programme" outlines a link between combinatorial data of "dessin d'enfants," the complex geometry of algebraic curves, and their corresponding algebraic number field of coefficients. We describe some fundamental objects and results which outline this theory. Our main goal is to describe $Mon(\beta \circ \alpha)$, the monodromy group of the composition of two dynamical Belyi maps α and β , of a certain broad subclass. This is joint work with N. Cameron, E. Goins, E. Lawrence, T. McKenzie, K. Pershell. (Received September 15, 2020)