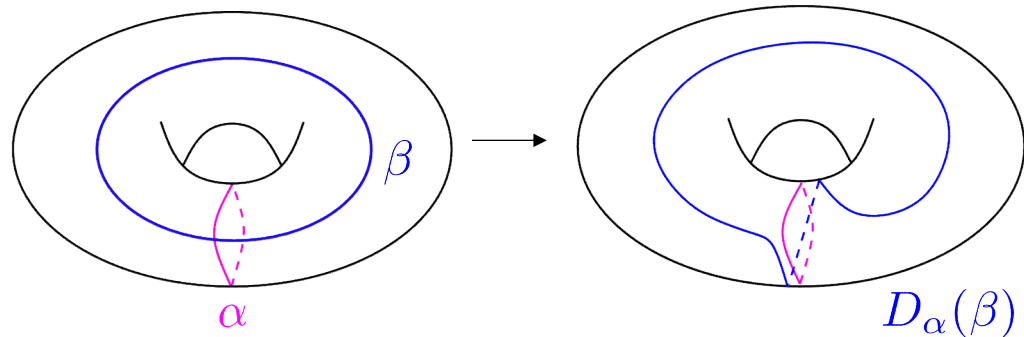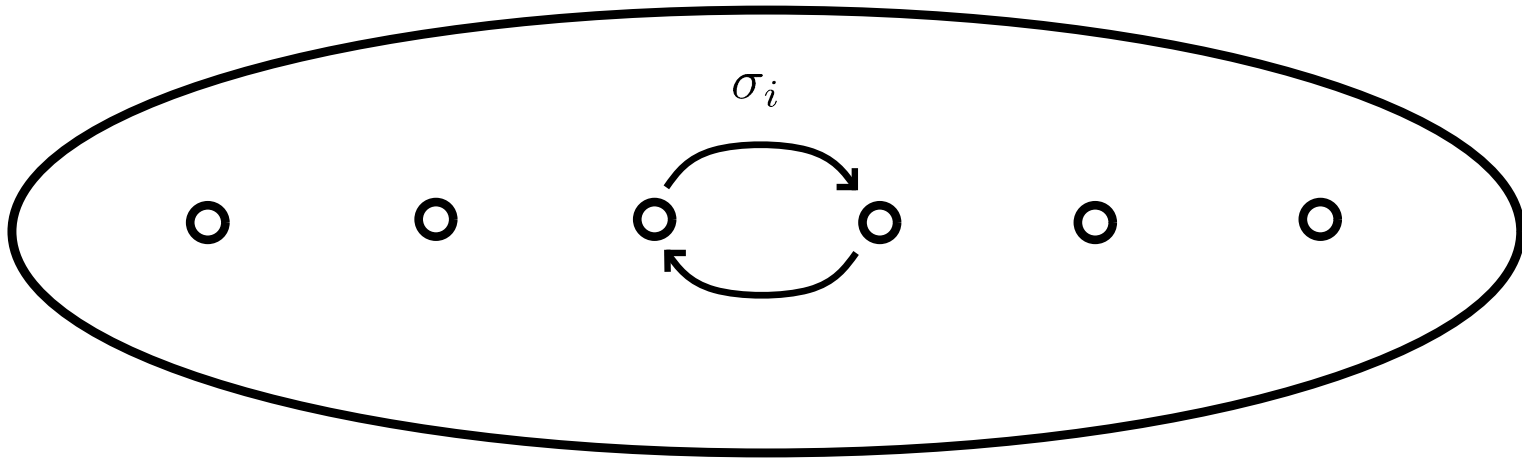Yvon Verberne
Georgia Institute of Technology
Postdoc
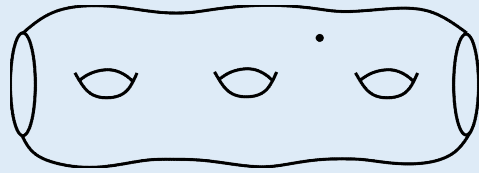
$\mathrm{MCG}(S) = \mathrm{Homeo}^+(S)/\mathrm{isotopy}$

Studying surfaces and their symmetries
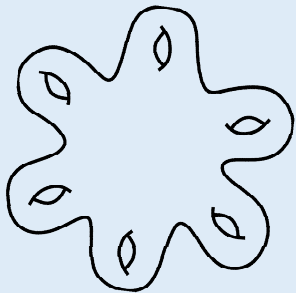
β

α

$D_\alpha(\beta)$

$$B_n = \mathrm{MCG}(D_n)$$

$B_n/Z(B_n) \cong$ subgroup of $\mathrm{MCG}(S_{0,n+1})$ fixing distinguished puncture
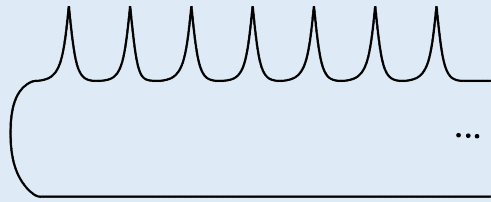
Yvon Verberne - Postdoc
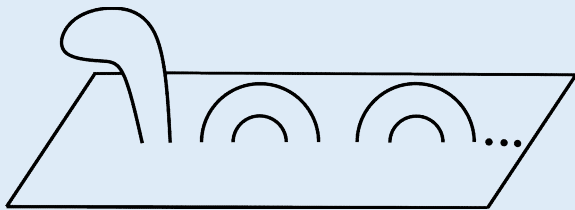
Finite-type surfaces

Q: (Farb) Are pseudo-Anosov mapping classes generic with respect to the word metric?

Q:(Brendle-Farb, Kassabov Lanier-Margalit, Margalit) How many elements are required to generate the mapping class group?

Q:(Fried) Which real numbers are stretch factors of pseudo-Anosov mapping classes?

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Infinite-type
surfaces

Q: Is there a Nielsen-Thurson classification theorem?

Q: (Mann-Patel) What is the right combinatorial object to associate to a big mapping class group?

Q: When a graph associated to an infinite type surface is hyperbolic, what can we say about its boundary?

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