"... arises by applying a *deformation* to the given totally degenerate semi-graph of anabelioids of pro- PSC-type [cf. Corollary 3.25]. This sort of result is reminiscent of topological results concerning subgroups of the *mapping class group* generated by pairs of *positive Dehn multi-twists*."

——-Yuichiro Hochi and Shinichi Mochizuki, "TOPICS SURROUNDING THE COMBINATORIAL ANABELIAN GEOMETRY OF HYPERBOLIC CURVES II: TRIPODS AND COMBINATORIAL CUSPIDALIZATION"

THE TRIVIAL NOTIONS SEMINAR

Rafael Saavedra

will speak on

The Nielsen-Thurston Classification

ABSTRACT

The group $SL_2\mathbb{Z}$ acts on the hyperbolic plane by isometries and on the torus by linear automorphisms. We can classify the elements of $SL_2\mathbb{Z}$ as either *elliptic*, , or *hyperbolic* in terms of how they act on the hyperbolic plane or on the torus. The Nielsen-Thurston classification extends this theorem to surfaces of higher genus by providing a geometric classification of the elements of the mapping class groups of surfaces. I will introduce the main objects in this story and the ideas behind the proof of the classification. On our way, we will talk about quasiconformal maps, hyperbolic pants, and moduli spaces of curves.

Thursday, November 11, 2021
at 11:30 am
Science Center, Room 232