

THE GEOMETRY OF SURFACE AUTOMORPHISM GROUPS

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We introduce a refinement of the classical curve graph first studied by Harvey in the 70's - the Fine Curve Graph - which is a Gromov hyperbolic metric space upon which the group of surface automorphisms naturally act by isometries. This has applications to the large scale geometry of group of surface automorphisms and gives a dictionary between the dynamics of this action on the Fine Curve Graph and the underlying surface dynamics.

(joint with S. Hensel and R. Webb)