

We will primarily follow the book [1]. This is close in spirit to the paper [3]. This requires a bit of hyperbolic geometry. A very good introduction to hyperbolic geometry is Thurston's notes [5], though it is a bit informal. The first four chapters of these notes were expanded into a book [7]. A good dictionary of hyperbolic geometry (formulae etc.) is [4].

A great survey of the topic from a different (Thurston's original) perspective is his research announcement [6]. This was expanded into a book [2] in French. I know where there is a translation if you would like to see it.

## References

- [1] Andrew J. Casson and Steven A. Bleiler. *Automorphisms of surfaces after Nielsen and Thurston*, volume 9 of *London Mathematical Society Student Texts*. Cambridge University Press, Cambridge, 1988.
- [2] A. Fathi, F. Laudenbach, and V. Poénaru. *Travaux de Thurston sur les surfaces*. Société Mathématique de France, Paris, 1991. Séminaire Orsay, Reprint of *Travaux de Thurston sur les surfaces*, Soc. Math. France, Paris, 1979 Astérisque No. 66-67 (1991).
- [3] Michael Handel and William P. Thurston. New proofs of some results of Nielsen. *Adv. in Math.*, 56(2):173–191, 1985.
- [4] John G. Ratcliffe. *Foundations of hyperbolic manifolds*, volume 149 of *Graduate Texts in Mathematics*. Springer-Verlag, New York, 1994.
- [5] W. P. Thurston. *The geometry and topology of 3-manifolds*. Princeton Lecture Notes, 1979.
- [6] William P. Thurston. On the geometry and dynamics of diffeomorphisms of surfaces. *Bull. Amer. Math. Soc. (N.S.)*, 19(2):417–431, 1988.
- [7] William P. Thurston. *Three-dimensional geometry and topology. Vol. 1*, volume 35 of *Princeton Mathematical Series*. Princeton University Press, Princeton, NJ, 1997. Edited by Silvio Levy.