Kasra Rafi*, rafi@math.toronto.edu, and David Dumas, Anna Lenzhen and Jing Tao.

Thurston’s Lipschitz metric on the Teichmüller space of the punctured torus. Preliminary report.

Teichmüller space can be equipped with a metric using the hyperbolic structure of a Riemann surface, as opposed to the conformal structure that is used to define the Teichmüller metric. This metric, which is asymmetric, was introduced by Thurston and has not been studied extensively. However, it equips Teichmüller space with a distinctive and rich structure. We examine various aspects of the coarse and fine geometries of this metric. In the case of the punctured torus, we come close to reaching a detailed understanding of the space. (Received August 10, 2015)