1077-51-1685 Spencer Dowdall, Moon Duchin* (Moon.Duchin@tufts.edu) and Howard Masur. Hyperbolicity and measure in Teichmüller space.

As is well known, Teichmüller space is not hyperbolic. On the other hand, the exceptions to hyperbolicity seem to be rare occurrences. We study a collection of different measures on Teichmüller space (with the Teichmüller metric) and show that, with respect to any of these measures, the average distance between points in the ball of radius r is 2r. In fact, on the way to this we show something stronger: if three points are sampled in the ball of radius r, then with high probability the midpoints of the geodesics connecting them pairwise come within a fixed distance of the center, independent of r. This is a way of making precise the idea that hyperbolicity is generic. (Received September 20, 2011)