1021-51-217 **Moon Duchin*** (`mduchin@math.ucdavis.edu`), Math Dept., UC Davis, 1 Shields Ave., Davis, CA 95616, and **Kasra Rafi**. *Divergence of geodesics in Teichmuller space and the mapping class group.*

The volume of a ball in Teichmuller space (with the Teichmuller metric) grows exponentially as a function of its radius, as in the case of hyperbolic space. We show that, despite this, the "circumference" of the ball grows only quadratically. To be precise, we prove that the rate of divergence of geodesic rays in Teichmuller space is never faster than quadratic, and we construct rays realizing the quadratic rate. Exactly the same statement holds in the mapping class group. (Received September 06, 2006)