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Martin J Bridgeman* (bridgem@bc.edu), Department of Mathematics, Boston College, Chestnut Hill, MA 02167, and **David Dumas**. *Sato-Tate like measures for geodesic laminations on hyperbolic surfaces*. Preliminary report.

We investigate the distribution of length segments for the intersection of a random geodesic with a geodesic lamination. These distributions arise from the pushforward of the volume measure on the unit tangent bundle of the surface by length functions associated with the geodesic lamination. We show that the distribution depends on a length spectrum associated with the complement of the lamination and give explicit formulae for the case of a maximal lamination. We give an asymptotic information for the general case. (Received January 21, 2008)