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Alessandro Sisto and **Samuel Taylor*** (samuel.taylor@temple.edu). *Largest projections for random walks and shortest geodesics in random mapping tori.*

We show that the largest subsurface projection distance between a marking and its image under the n th step of a random walk in the mapping class group grows logarithmically in n , with probability approaching 1 as n goes to infinity. As an application, we confirm a conjecture of Rivin about the asymptotic behavior of the systole of random mapping tori. (Received September 25, 2017)