1126-60-384 **Robert Buckingham*** (buckinrt@uc.edu) and **Karl Liechty**. *Nonintersecting Brownian motions on the unit circle with drift.*

Recently, Dong and Liechty determined the large-n asymptotic behavior of n Brownian walkers on the unit circle with non-crossing paths conditioned to start from the same point at time zero and end at the same point at time T. We analyze the analogous problem with a nonzero drift μ. We show there is a critical value μ_c for which the total winding is asymptotically zero with probability 1 for $|\mu| < \mu_c$. We compute μ_c explicitly in terms of T and discuss the positive winding case. Our results follow from asymptotic analysis of related discrete orthogonal polynomials carried out via the nonlinear steepest-descent method for Riemann-Hilbert problems. (Received January 17, 2017)