

Research Highlight: Nonintersecting Brownian bridges between walls

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A Brownian bridge is roughly a track of a drunken man from the pub to the residence. Suppose the pub and the residence are between two walls, then the drunken man may be lucky if the wall simply bounces him back (reflective), or unlucky if the wall kills him (absorptive).

To make the situation funnier, we consider a large group of drunken men starting from the same pub and returning to the same residence. Moreover, assume that the drunken men are vicious that they fight with one another and then go to jail together if two of them collide. We are interested about the typical behaviour of the drunken men, especially the ones whose tracks are close to a wall, given that they do not hit one another. This is the topic of my paper with K. Liechty.

Reference:

D. Wang and K. Liechty, "Nonintersecting Brownian bridges between reflecting or absorbing walls". *Advances in Mathematics*, 309 (2017): 155-208.

