[Talk 26] Nonintersecting Brownian motions between two reflecting walls or two absorbing walls

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We compute the asymptotics of nonintersecting Brownian motions between two absorbing walls or between two reflecting walls, under the condition that all the particles start and end at a common point. These two probabilistic models are related to 2D Yang-Mills model with orthogonal and symplectic symmetries. We find the double scaling limits for both models as the number of particles tends to infinity, and show the universality of the results. We derive the results for the two models by using the known result for nonintersecting Brownian motions with periodic boundary condition*†*. This work is inspired by the computation of the partition functions*‡* for the models.

† K. Liechty and D. Wang, Ann. Probab. **44**, 1134 (2016)
‡ P. J. Forrester, S. N. Majumdar and G. Schehr, Nuclear Phys. B **844**, 500 (2011).