

Transient random walk in symmetric exclusion

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In this poster we study a nearest-neighbor random walk in a one-dimensional dynamic random environment consisting of a simple symmetric exclusion process in equilibrium. Assuming that the random walk on occupied/vacant sites has two different local drifts to the right, together with a mild condition on the values of these drifts, it is possible to obtain a strong law of large numbers, a functional central limit theorem and a large deviation bound. This poster is based on [1].

References

- [1] L. AVENA, R.S. DOS SANTOS AND F. VÖLLERING, *Transient random walk in symmetric exclusion: limit theorems and an Einstein relation*, ALEA (Lat. Am. J. Probab. Math. Stat.) 10 (2013) 693–709.