Brownian Polymer in Poissonian Environment

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Abstract.

We consider Brownian motion in a potential made of transverse disks centered at the points of a space-time Poisson process. We discuss the * phase diagram in the parameters space (inverse temperature β , intensity ν of the Poisson field). * path localization, which becomes complete as $\nu\beta^2$ tends to infinity. For that, we heavily use integration by parts and "smart paths" techniques. Joint work with Nobuo Yoshida.