ATELIER « SYSTÈMES STOCHASTIQUES DE PARTICULES EN INTERACTION »
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WORKSHOP "INTERACTING STOCHASTIC PARTICLE SYSTEMS"
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Annealed Large Deviations for the Energy of a Polymer

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We consider the simplest charged polymer : a randomly charged symmetric random walk on the cubic lattice in dimension three or more. We consider that charges interact pairwise only if they sit on the same site. We study the upper and lower tail of the energy, when we average over both randomness. For the upper tails, we have an explicit rate function for a large class of charge distributions.