1108-81-365

Robert Sims^{*}, Department of Mathematics, 617 N. Santa Rita Avenue, Tucson, AZ 85721, and Simone Warzel, 85748 Garching b. Munchen, Boltzmannstrasse 3, Garching, Germany. On Correlation Decay in the Random XY-Model. Preliminary report.

We consider the XY-model in a random transverse field. For this model we prove that, upon disorder average, both the ground state and thermal state correlations decay exponentially. Our methods are based on a deterministic bound which is valid for both dynamic and static multi-point correlations of general one-dimensional, quasi-free states. This is joint work with Simone Warzel. (Received January 18, 2015)